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JANUARY 26, 1953

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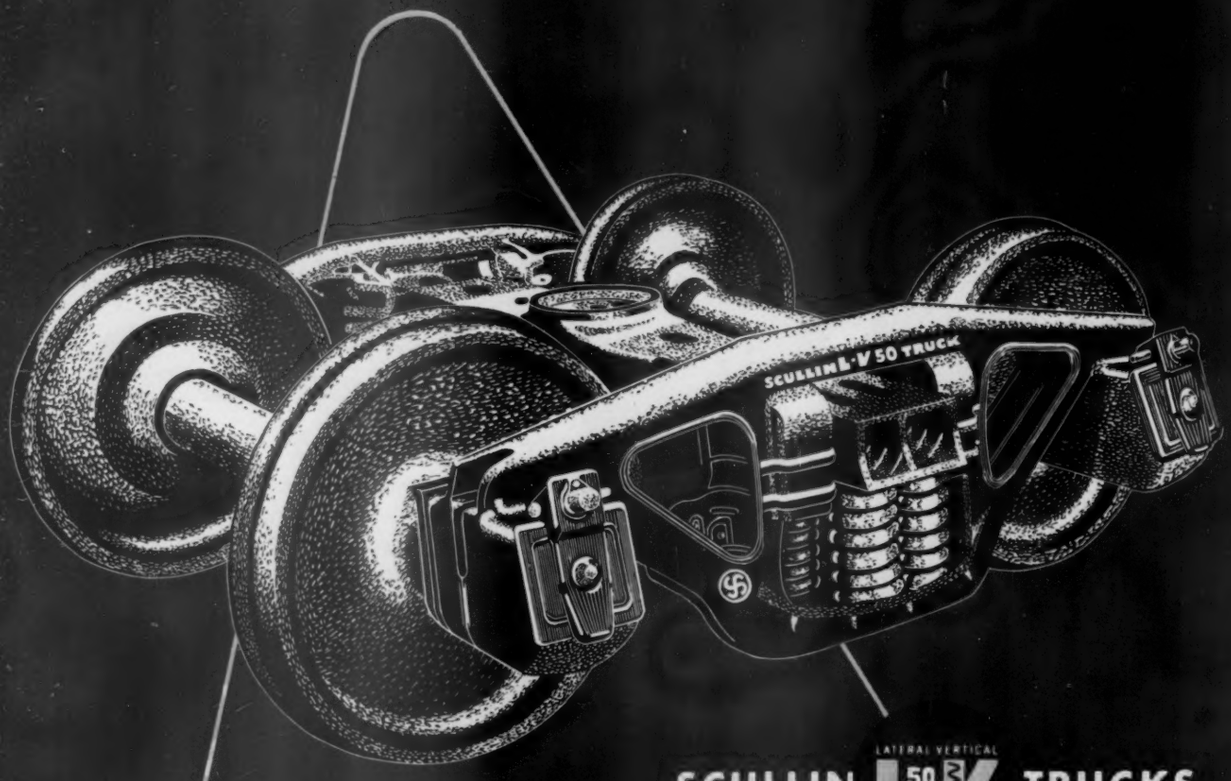

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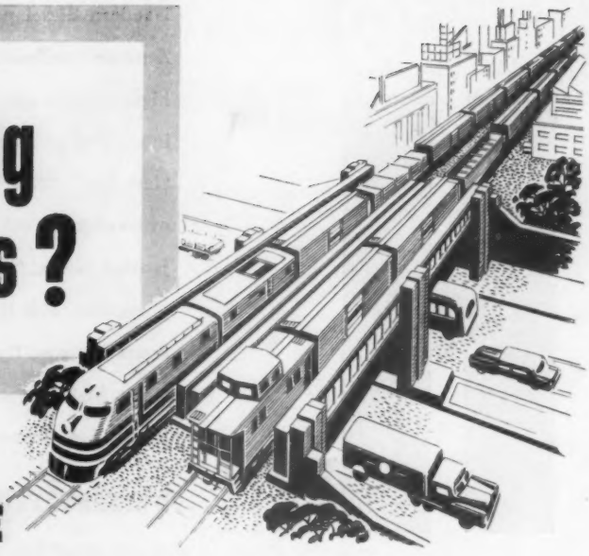

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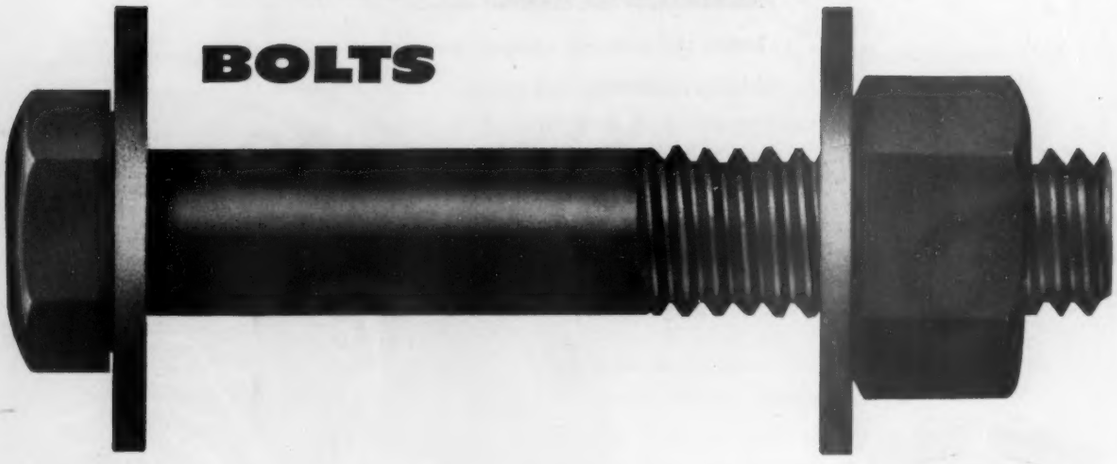

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Vol. 134, No. 4 January 26, 1953

RAILWAY AGE

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IN THIS ISSUE

EDITORIAL COMMENT:

Need for Heavy and Fresh Thinking on the Freight Rate Problem 37
Coercion of Employees Under the "Union Shop" 38

FEATURE ARTICLES:

How the Southern Pacific Uses Train-Wayside Radio in the High Sierra 39
Modern Freighthouse for San Francisco 42
J. P. Newell Puts the Railroads' Plight in Supply Manufacturers' Language 46
Belgium Maps Extensive Electrification Program, by John W. Ashton 47
Don't Hurry a Freight-Train Stop 48
McGinnis Moves from NS to CofG 51

NEWS FEATURES:

T.A.A. Board Approves Transport Policy Project Report 11
Philadelphia Railroads "Rescue" Thousands 12
Railroads Conclude Testimony in "Productivity" Case 13
Fast, Efficient Restoration Job Puts Washington Station Back in Shape 14
Pennsylvania Truckers Sue 30 Eastern Railroads for "Conspiracy" 17

DEPARTMENTS:

News of the Railroad World 11
Revenues and Expenses of Class I Railways 19
New and Improved Products . 33
Benchmarks and Yardsticks .. 35
Letter from a Reader 50
Organizations 56
Supply Trade 56
Equipment and Supplies 58
Construction 58
Financial 58
Railway Officers 61
Current Publications 65

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WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, eleven months	
1952	$9,646,357,451
1951	9,489,714,254
Operating expenses, eleven months	
1952	$7,341,636,162
1951	7,369,948,055
Taxes, eleven months	
1952	$1,169,580,294
1951	1,100,804,634
Net railway operating income, eleven months	
1952	$ 964,041,996
1951	832,132,965
Net income, estimated, eleven months	
1952	$ 678,000,000
1951	567,000,000
Average price railroad stocks	
January 20, 1953	68.85
January 22, 1952	57.41
Car loadings, revenue freight	
2 weeks, 1953	1,251,317
2 weeks, 1952	1,354,826
Average daily freight car surplus	
January 17, 1953	76,426
January 19, 1952	10,689
Average daily freight car shortage	
January 17, 1953	703
January 19, 1952	4,494
Freight cars delivered	
December 1952	7,845
December 1951	8,458
Freight cars on order	
January 1, 1953	80,296
January 1, 1952	123,947
Freight cars held for repairs	
December 1, 1952	96,085
December 1, 1951	88,911
Average number of railroad employees	
Mid-November 1952	1,238,688
Mid-November 1951	1,258,232

In This Issue . . .

HOW PHILADELPHIA RAILROADS "RESCUED" strike-stranded transit travelers, and how Washington Union station was restored to "normal" in time for Inauguration day traffic, are reported pictorially on pages 12, and 14-15, respectively. Other news pages cover a variety of other developments of industry-wide significance—such as the T.A.A.'s final approval of most of its Cooperative Project report; the "damage" suit filed against 30 railroads by a group of Pennsylvania truckers; final railroad testimony in the "improvement factor" wage increase case, etc., etc. And, too, on pages 19-22, is our regular monthly compilation, by individual Class I companies, of revenues, expenses and earnings — this time for November and 11 months of 1952.

SOME EFFECTIVE THINKING is badly needed to free the railroad industry from its "regulation muddle." That is the thesis of this week's leading editorial (page 37), which uses as a starting point some of the effective comments on railroad rate problems made in a recent address by Fred Carpi, traffic vice-president of the Pennsylvania.

TRAIN-WAYSIDE RADIO in the High Sierra and some of the advantages accruing to the Southern Pacific from its use, are outlined in the illustrated feature article which begins on page 39. Other feature articles describe the Santa Fe's new San Francisco freighthouse (page 42); discuss use of air brakes to provide sure control of long freight trains (page 48); and cover top personnel changes on the Central of Georgia (page 51).

J. P. NEWELL, operating vice-president of the Pennsylvania, seems to have an unusual knack for outlining railroad problems in language which is easily understandable and yet persuasively forceful. Last fall, before the New York Railroad Club, he discussed the railroad passenger service problem in an address which was subsequently reprinted in Railway Age *(November 3, page 88). More recently, in talking to a group of railroad suppliers at Chicago, he "put the railroads' plight in supply manufacturers' language"—language which is reprinted in part on pages 46 and 47 of this issue, because it points up so briefly, but so emphatically, some of the industry's principal troubles.*

In Washington . . .

HOW ANYONE CAN—with a straight face—claim **"improvement factor"** or **"productivity"** wage increases for railroad employees—in

WEEK AT A GLANCE

view of figures included in the latest issue of the I.C.C. Bureau of Transport Economics and Statistics' "Monthly Comment"—is hard to see. Average straight-time hourly earnings of railroad employees (excluding executives) during the first 10 months of 1952, the figures show, aggregated $1.791, an increase of 148.4 per cent over 1939, when average straight-time pay was 72.1 cents per hour. No other interested segment of the railroad industry has remotely approached that gain; rates themselves, as noted below, are up, percentagewise, only about half as much.

WHAT PRICE GOVERNMENT OWNERSHIP? The latest "Monthly Comment" (of an I.C.C. bureau) shows that between 1938 and 1952, while freight rates in the United States were going up 78.9 per cent, rates in Great Britain advanced 130 per cent (page 55). Average revenue actually received per ton-mile has gone up far less—and, as to this country, very much less than the near 150 per cent increase, noted just above, in wages of U. S. railroad employees—who are even now seeking still further "productivity" gains.

. . . And Elsewhere

REDUCING "HEAD-END" TRAFFIC DEFICIT—A major western road is conducting extensive experiments with mechanical materials handling equipment, containers, and new methods, in an effort to reduce the cost of handling head-end traffic. Studies include handling problems at small, intermediate and large stations, as well as at major terminals.

THE EARLY PART OF 1953 will probably see complete dieselization of two more major railroads—the Southern, which expects to achieve that goal with near future delivery of 30 road-switchers, and the Wabash, which will reach it with first-quarter delivery of 27 new units. The Southern states that it will be the "largest railroad in the country" to be all diesel operated. The Wabash total diesel fleet will consist of 222 locomotives (264 units)—an investment of over $43 million.

AS BRIEFLY REPORTED in last week's Railway Age, *Charles R. Hook, Jr., vice-president—personnel of the Chesapeake & Ohio, has been named to the post of Deputy United States Postmaster General in the new Eisenhower administration. Mr. Hook's business and railroad career is summarized on page 54 of this issue.*

OVERTURES TOWARD MERGER of the Chicago, Indianapolis & Louisville and the Chicago & Eastern Illinois, mentioned on page 49 of the December 22, 1952, *Railway Age*, are continuing. The first statement issued for general public consumption has come from Homer J. Livingston, chairman of the stock trustees of the Monon, who said that "while nothing might come [of the overtures], yet they were sufficient to merit consideration by the responsible parties. No conclusions of any sort have been reached, but it is likely that further discussions of the matter will follow."

THE CAREER OF FRED A. POOR, chairman of the board of Poor & Co., which controls some 16 manufacturing and sales companies—most of them in the railway supply field—was selected by the Chicago Tribune's financial editors for detailing in the paper's feature story series, "The Road to Success." Mr. Poor started in business for himself by manufacturing and marketing anti-creepers and other rail appliances purely as a "hedge" against losing his regular job in the merger of several manufacturing concerns. Those three concerns did merge—into the Rail Joint Company—but instead of losing his job, Mr. Poor was promoted and later became western manager. Today, the Rail Joint Company is one of Poor & Co.'s subsidiaries.

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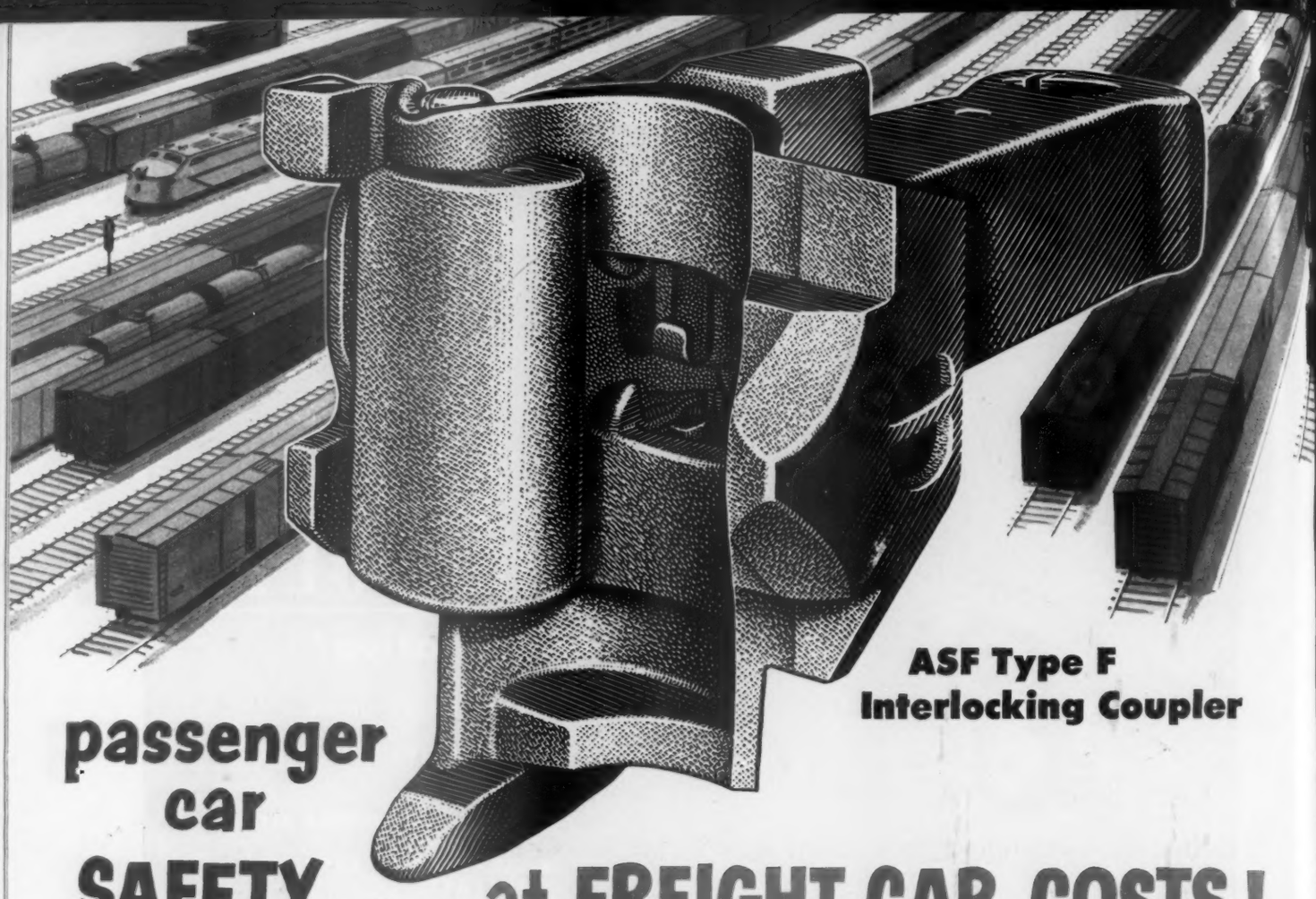

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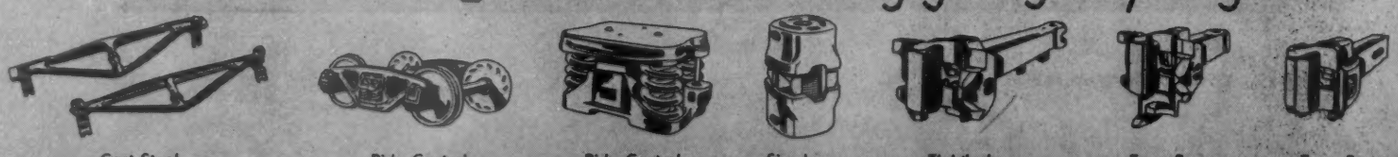

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T.A.A. Board Approves Transport Policy Project Report; Next Step — Suggesting a Series of Bills for Congress

Controversial Fourth Section repeal, agricultural products exemption issues, go back for further study by project group

Fruits of the Transportation Association of America's four-year-long Cooperative Project on National Transportation Policy should soon be evident in a series of bills to be submitted to Congress. The association's board of directors, following the T.A.A.'s annual meeting in Chicago on January 16 and 17, has put its stamp of approval on the project's report—but with two important exceptions. These are the statements on agricultural products exemption and on repeal of the Fourth Section of the Interstate Commerce Act (the so-called "long-and-short-haul" clause), both of which the board turned back to the project group and the regional forums for further study "in an effort to harmonize differences."

In announcing the board's general approval of the proposed legislative program, T.A.A. characterized the program as designed to: (1) "Assure successful, economical transportation in the public interest; (2) reduce the burden of government regulation; and (3) afford greater equality of competition among the several forms of transport." A detailed summary of the original project report, submitted last spring to the T.A.A.'s board of directors, appeared on page 95 of the June 2, 1952, *Railway Age*.

30,000 Views Aired

The project report represents the combined efforts of 300 experts representing all forms of transportation, shippers and investors—on a nationwide basis—for a period of nearly four years. After their report was initially submitted to the association's board of directors, it was re-transmitted to T.A.A. regional forums and to over 30,000 economic groups and individuals for careful review and reaction. The board — composed of 90 members — then considered all phases of each issue covered by the report in the light of the results of this test of public opinion. The series of bills which will be submitted to Congress as the result of this undertaking stem from the association's offer to assist the House Committee on Interstate and Foreign Commerce back in 1948.

On the question of agricultural products exemption, the association cited the general agreement among panel members of the project that the present law pertaining to transportation of certain farm products by unregulated for-hire carriers "is greatly abused." The board, in recommending further study of the problem in cooperation with farm organizations, said it fully comprehended the marketing problems of agriculture. At the same time, the board also suggested that Congress direct "appropriate government agencies to investigate the illegal transportation of non-exempt commodities by such unregulated, for-hire carriers and violations of law with respect to collective rate making."

To further its study, the board adopted a plan whereby the association will establish an agricultural advisory committee of its us e panel of the project "in order to conduct further research and negotiation on basic economic and legislative proposals affecting transportation." It will also establish permanent agricultural advisory committees as divisions of the various regional forums.

The long-and-short-haul clause of the Interstate Commerce Act has already been characterized as "outmoded and burdensome" by the project report. The board of directors stated that field reviews of its recommended elimination indicated such marked differences of opinion among groups and regions, that the proposal has been referred back to the project and regional forums for further study in the belief that "minority opinion must be given due weight under the democratic system and that all sections of the country must be fairly treated."

1953 Project Outlined

During 1953, the project group will give prime consideration, among other issues, to the federal structure of regulation and promotion, the association said. A report on this subject will be presented to the board of directors in September of this year. In this study, the project will follow the same procedure of field review.

Average Straight Time Hourly Pay Reaches $1.791

Railroad employees, excluding "executives, officials and staff assistants," received $1.791 in average straight time compensation per hour during the first 10 months of 1952. This reflected in-

Philadelphia Railroads "Rescue" Thousands . . .

Otherwise stranded by four-day strike of transit lines

Philadelphians rely on public transportation to a far greater extent than do residents of most American cities. When a total strike of the Philadelphia Transportation Company began early on the morning of Wednesday, January 21, the Pennsylvania and the Reading were ready to handle thousands left without their usual street car, bus, subway or elevated service. Extra trains augmented service on the five Pennsylvania and six Reading suburban routes radiating from downtown. Shuttles between inter-city stations eased the load on regular trains. Personnel recruited from all departments aided in sale and advance collection of tickets, and helped direct the orderly movements of unprecedented crowds. The Reading Terminal, for example, which normally handles about 40,000 passengers a day, moved 85,000 passengers on the second day of the strike—most of them in concentrated peaks during the morning and evening rush hours. By the third day, extraordinary measures to handle the increased load had become nearly routine.

Philadelphia Evening Bulletin

Stations like Angora, only 4.5 miles from downtown Philadelphia on the Pennsylvania's West Chester branch, were swamped with rush hour customers who normally use transit service. Ticket collections were made as passengers boarded, by trainmen and by employees assigned temporarily to the station.

Philadelphia Inquirer

From 3:30 p.m. to 6:30 p.m. seas of people flowed through Reading Terminal with little confusion. Admission to the train concourse was permitted only to passengers holding tickets. Observers stationed in an overhead booth in the concourse, and at an office building window across Market street, coordinated with railroad and city police to control entry of passengers to the station, and five mobile monitors equipped with walkie-talkie sets kept in touch with the stationmaster to control dispatch of extra trains as loaded.

The Pennsy magazine

Frankford Junction, adjacent to the elevated line and not normally a commuter station at all, did a booming business. More than 450 people were reported by the press to be waiting there for inbound trains by 7 a.m. on the second day of the strike.

Philadelphia Evening Bulletin

Tickets went like the proverbial hot cakes as the Reading opened every window at Reading Terminal. All benches had been removed from the area to take care of the crowd and speed movement to and from the ticket windows.

creases aggregating 148.4 per cent since 1939, when the average straight time pay was 72.1 cents per hour.

These and other wage data were presented in the latest "Monthly Comment" issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission.

Total compensation received by all employees during last year's first 10 months was $4.4 billion, which was equivalent to 50.4 per cent of gross revenues for the same 10 months. This per-cent-compensation-of-gross ranged, in the 1939-1951 period, from 1945's 43.4 per cent to 1946's 54.7 per cent.

"The relatively high payroll percentage of revenues in 1946," the bureau explained, "was the result of a sharp drop in revenues coupled with an increase of about 20 per cent in average wage rates."

Railroads Conclude Testimony in "Productivity" Case

Railroads themselves require an "improvement factor" adjustment in their earnings before they can pass it on to their employees, J. M. Symes, executive vice-president of the Pennsylvania, testified on January 15 before a government referee in opposition to new wage demands of 19 unions.

The unions are seeking a so-called improvement factor wage increase for 1,158,000 employees under agreements that expire next October 1 (*Railway Age*, January 19, page 11). Hearings are being held by Paul N. Guthrie, professor of economics of the University of North Carolina, who was appointed by President Truman to pass on the workers' claims.

"Railroad workers as well as management should be working to solve the industry's problems at the source," Mr. Symes said. "As things are now going, this big industry we are working for is headed for trouble that could adversely affect all of us."

The railroad executive lambasted the unions' claim that rising labor costs have "spurred" management on to increased efficiency and productivity. "We have been spurred," he countered, "in trying to keep our heads above water; in trying to meet our subsidized competition; in trying to obtain increased rates to meet increased expenses; in trying to figure out where the money was coming from to meet higher costs; in trying to make plans for heavy debt maturities that are coming due; and in trying to look after the best long-term interests of our employees, our customers, and our owners."

Unions Stop "Productivity"

The carrier spokesman suggested that "maybe the railroad unions should use some of these spurring methods themselves—to actually increase productivity and efficiency, so the carriers can actually obtain it at least simultaneously with the time they are asked to pass it on to their employees. But it doesn't work that way. Instead of helping management bring about increased productivity, some of the railroad unions are continually trying to stop it.

"They try to obtain excess crew bill legislation, and have been successful in some states. They advocate train length limit bills. They try to place extra men on diesel locomotives. When we attempt to remove unprofitable services they oppose us before state commissions. It is certainly inconsistent to try to prevent increased productivity and then come in and say they want to participate in the future benefits of increased productivity that they have tried so hard to prevent."

Symes said that "rail unit productivity increases over the years have been largely because of capital expenditures for improved facilities and for more modern equipment. . . . This has been going on ever since the beginning of railroading."

Employees Already Sharing

Train and engine service employees, he declared, have been sharing in the increased productivity from these capital expenditures in the way of shorter hours—getting over the road faster without any reduction in their basis of pay. "Their hourly earnings for time actually worked have been on the increase—over and above increases granted in general wage cases. At the same time, the capital expenditures the railroads have made have improved working conditions, and less manual effort is required to perform the work."

Savings from dieselization, he added, "have been more than siphoned away to take care of increased wages, including those resulting from the shorter work week; increased cost of materials, interest and pay-off charges on installment buying of diesels themselves—all over and above what we have been able to obtain in increased rates. And the 'honeymoon' is about over insofar as opportunities of additional savings from diesel locomotives are concerned."

Mr. Symes also said that high labor costs are forcing the railroads out of the passenger business. "We don't want to get out of the passenger business," he said. "We can't afford to get out of it. We have too large an investment in this phase of our operation that would become idle and place too heavy a burden on the freight business." But the cost of performing passenger-train service, he declared, is entirely too high and "one of the principle reasons for its being so high is because of the exceedingly high wage rates that are being paid for the performance of this service."

Earnings of railroad workers have increased far more than the increase in railroad productivity regardless of whether long-term or short-term comparisons are used, Dr. Jules Backman, New York economist, and the final railroad witness, said on January 16.

Since 1929, he said, hourly wages of railway employees increased by 181.2 per cent compared with a rise of only 104.3 per cent in railroad productivity as measured by traffic units per hour paid for. As a result, railroad workers have more than shared in gains in productivity as contrasted with treatment received by shippers, travelers and stockholders. To a large extent, the witness said, "it was because wage increases had exceeded by a wide margin gains in productivity that substantial rises in freight rates and other charges became necessary."

Stockholders have not benefited from productivity gains, he said, but rather have contributed through foregone dividends which have helped to finance a significant part of the capital equipment expenditure program which is largely responsible for the gains.

"It would be a distortion of facts to suggest that the rise in total operating revenues reflects primarily greater productivity of railroad employees," Dr. Backman said. "The flow of cause and effect has been clear. Higher wages necessitated higher freight rates and charges which in turn increased gross revenues. We cannot now turn around and say that the rise in revenues resulting from past wage increases shows that new wage increases can be paid out of productivity gains."

An improvement factor increase is "particularly ill-advised" for the railroads, the witness said, because they are very vulnerable even to modest decreases in volume. Such decreases in volume are probable, he testified, when the stimulus to our economy caused by the current armament production program is removed. "Rising wage costs which could not be offset at least in part through rising volume, might in turn require a hike in freight and passenger rates."

Pointing out the inflationary effect of granting so-called improvement increases in the railroad industry, Dr. Backman said "approval of the unions' demand in this case might well touch off demands for similar wage increases throughout the ranks of all industry. Unlike the automotive industry, repercussions of wage and hour changes for railroad workers are felt in virtually every community, large and small. It is a national wage policy that is being considered here, not only a railroad wage policy."

Sees Pacific Great Eastern Absorbed by CNR, CPR

Roy W. Brown, in a feature article appearing in a recent edition of the Vancouver (B.C.) Sun, forecast that, on the basis of the Canadian National's taking over of running rights across a bridge into North Vancouver plus

several other factors, the CNR will eventually take over the Pacific Great Eastern from the provincial government of British Columbia.

Mr. Brown (whose hypothesis has not been denied by the CNR), points out that "the PGE owns two miles of the best waterfront in North Vancouver . . . more important and interesting property from the standpoint of industrial development than the Harbour Board holdings on the east side of North Vancouver now being taken over by the CNR. . . . This two miles of key waterfront industrial property is, in fact, one of the chief assets of the PGE—at least as an attraction to a great railway company like the CNR."

Mr. Brown said he was not intimating that any formal negotiations had been begun between the provincial government, the PGE and the CNR. He added, too, that "it could easily be that the CNR and the Canadian Pacific would go into partnership on the PGE."

He also pointed out that, with completion of the PGE's main line northward to Prince George and its first contact with another road (the CNR's Prince Rupert line), a change in long-established traffic patterns is taking place. "For years," he said, "the

1 **The locomotive (right) moved completely across the concourse and came to rest near the wall of the main waiting room, with its rear end resting on the floor of the basement below. The first coach (right rear) had its front end on the basement floor and its rear end at the edge of the 75-ft. by 120-ft. hole. The front end of the second car (left) extended over the break in the floor.**

Fast, Efficient Restoration Job . . .

Puts Washington station back in shape for inaugural traffic

At about 8 a.m. Thursday, January 15, because of an inexplicable brake failure, the "Federal," inbound from Boston, crashed out of control through the barrier and across the concourse of the Washington, D.C., Union station (*Railway Age*, January 19, page 18).

At about 8 a.m. Monday, January 19, an inaugural special rolled smoothly to a stop on Track 16—the same one the "Federal" had left almost exactly four days earlier—to discharge its passengers into a concourse which showed almost no evidence of the accident.

The 96-hour restoration job—rendered imperative by the

Wide World Photos, Inc.

3 **As soon as the cars and locomotive were out of the way, an army of some 400 workmen swarmed over the scene, clearing debris and laying a temporary plank floor, subsequently covered with asphalt.**

overwhelming trend of Canadian National traffic has been westward, not eastward . . . This situation will now be rectified. Canadian National empties piling up at Vancouver will be transferred to the PGE, loaded with lumber in Central Cariboo and handed over to the CNR at Prince George for shipment east—more business for both roads."

Calling attention to the PGE's plans to complete its line southward from Squamish (the present southern terminus) over the remaining 41 miles into North Vancouver, Mr. Brown concluded: "If one or both transcontinental railways show signs of pursuing in earnest the idea of taking over the PGE, it might be that a condition of purchase or lease would be completion of this line into North Vancouver."

British Columbia government officials are said to be considering a new and shorter route for the proposed northern extension of the PGE. This new route would reportedly cut 110 miles and millions of dollars off the 270-mile, $30-million Pine Pass route from the railroad's new northern terminus at Prince George into the Peace River country.

The route proposed earlier would run from Prince George, in the geo-

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imminence of Inauguration day and its anticipated influx of visitors from all parts of the country—was carried out by the Washington Terminal Company, with the assistance of personnel and equipment furnished by the Pennsylvania. Sidney Kerl, WT manager, was in general charge of the work, while H. J. McNally, engineer maintenance of way and structures for the terminal company, had immediate supervision. The accompanying pictures show what was involved in the restoration work (1 and 2); something of how it was done (3); and the final result (4).

The fact that the accident produced only a few injuries, most of them minor, and no deaths, was attributed to the presence of mind and quick action of the train engineman in sounding warning signals as soon as he discovered the brake failure; of the train crew in warning passengers to brace themselves for the impact; of a towerman in warning the station; of station employees in clearing the concourse; and of course to the safety features inherent in the design of modern passenger equipment.

2 **Preliminary steps in repairing the damage were to rerail the two coaches which followed the locomotive into the concourse. The locomotive was simply lowered into the basement, where it was covered over by the new floor, and where it will later be dismantled for removal. Damage included destruction of a concourse newsstand, and of the stationmaster's office, which were in the train's path.**

Washington Daily News

4 **Inauguration visitors arriving on the same track only four days after the accident saw only this perfectly normal concourse, including a restored newsstand doing "business as usual."**

graphic center of British Columbia, through Pine Pass to Dawson Creek on B.C.'s northeast frontier. Construction on some long stretches of this route would cost as much as $105,000 a mile.

The suggested new route would run in a nearly straight line through Monkman Pass in the Rockies and would connect with the Northern Alberta Railways at Beaverlodge, inside the Alberta border. This route would run through much developed farming country and past the site of new oil explorations.

Canadian Wage-Rate Situation Grows More Complex

Faced by an apparently certain wage increase for their 25,000 employees represented by the Brotherhood of Railway Trainmen, and by a threatened strike of those employees on February 2 if a larger increase is not granted, Canadian railroads last week applied to the Board of Transport Commissioners for an additional increase of 7 per cent in freight rates.

Apparently angered by what he termed a "triple-barreled" rate case, Chairman John Kearney, of the Transport Board, asked the Canadian Pacific to withdraw this latest application, but the railway, up to the time this issue of *Railway Age* went to press, had not only refused to withdraw the application, but had asked that it be set for a hearing as early as January 29. Chairman Kearney's reference to the "triple-barreled" rate case arose from the fact that the railroads already have pending before the board an application for a 9 per cent rate increase, for which the request was originally filed last summer; and also a petition from the Canadian Pacific, on which hearings are now in progress, for establishment of a new rule of rate making, which would authorize rates to be set so that the CPR would realize a return of 6½ per cent on its net investment in railway property.

The latest requested increase of 7 per cent would yield Canadian railroads additional revenue estimated at $35 million per year, while the pending 9 per cent increase, if granted, would yield about $45 million per year.

Meantime, though there is still a possibility of federal government action to postpone a walkout, the railroads are making initial preparations for the threatened trainmen's strike, which has been set for February 2. Conciliation boards which studied the dispute have recommended, and the railways are apparently willing to grant, wage increases of 12 per cent in return for some changes favorable to the companies in working rules. The B.R.T. wants an increase of 35 per cent, plus an escalator clause and a 40-hour week for yard service employees. Enginemen are not involved in the dispute, but trainmen and a large number of conductors and yard employees are.

Uniform Rate Structure Incompatible With Competitive System—Schwietert

The trend toward even greater uniformity in the rate structure which is now evident in the Interstate Commerce Commission's thinking interferes with operation of a healthy competitive system in transportation, according to A. H. Schwietert, traffic director of the Chicago Association of Commerce & Industry, speaking at the annual meeting of the Delta Nu Alpha Transportation Fraternity in Cleveland, January 14.

"Under a competitive system," Mr. Schwietert said, "the weight to be given the various elements in rate making is substantially different from the weight given those same elements when a monoply exists."

Despite this fact, he pointed out, the I. C. C. is strengthening its program for uniformity in the entire class rate structure which was initiated in 1939. "Insofar as the rail rate structure is concerned we now have a uniform class rate scale and a uniform freight classification throughout the territory east of the Rocky Mountains. Under another investigation the commission is considering the class rate problem in the intermountain and Pacific Coast areas. Since the effective date of the class rates, numerous exception ratings on l. c. l. traffic have been cancelled and cancellation of others is contemplated. It is probable that consideration will be given to cancellation of carload exception ratings and commodity rates, thus leading toward a uniform scale with all commodity rates related to the first-class rate. Such a trend was developing in the late twenties and early thirties as a result of general investigations of the commission into the Southern, Southwestern, Western Trunk Line and Official Territory class rate scales.

"Competition, however, from the motor carrier industry soon made it obvious that if railroads expected to continue to participate in the traffic it was necessary to make rates to meet competitive conditions and not adhere to a fixed uniform scale. It seems to me that this same situation will develop with respect to the present class rate structure.

"So long as traffic remains on a high level, with competing forms of transportation each handling about as much as their capacity will permit, a somewhat uniform and stable rate structure can be maintained. However, when traffic starts to fall off and actual competition begins to work, a rate structure made uniform throughout a large territory primarily for the sake of uniformity is bound to break down. Competition, costs and other transportation conditions vary in different sections of the country. Industrial and commercial conditions are constantly changing. While the cost of transportation is not the only element to be considered, nor can it be used as a method for determining individual rates, it becomes the most important element under a truly competitive transportation system.

"An important question is whether we are going to insist upon a uniform rate structure, or whether we want the advantages of a competitive system. To maintain a uniform rate structure under competitive conditions, would seem to require maximum and minimum rate orders by the I. C. C. It would also appear to require a differential relationship among the several types of carriers. The differential fixed by the commission would determine the relative volume of available traffic which each type of carrier is permitted to haul. In my opinion, such a system of rates is not in the best interest of the shippers, the carriers nor the public. There is no substitute for healthy competition."

Mechanical Division Scholarship at Stevens

The Mechanical Division of the Association of American Railroads is offering a special scholarship in mechanical engineering at the Stevens Institute of Technology, Hoboken, N.J., to sons of members of the division. The scholarship, established in 1891, has a value of $1,200 and will be available in September.

The single engineering course offered by Stevens leads to the degree of mechanical engineer. It includes instruction in fundamentals of electrical, civil and chemical engineering and management. Candidates for the scholarship, applications for which close May 31, must have completed four years of high school mathematics, and one year each of physics and chemistry, and rank in the top fifth of their graduating classes. Applications can be had by writing to Fred Peronto, secretary of the Mechanical Division, 59 East Van Buren street, Chicago 5.

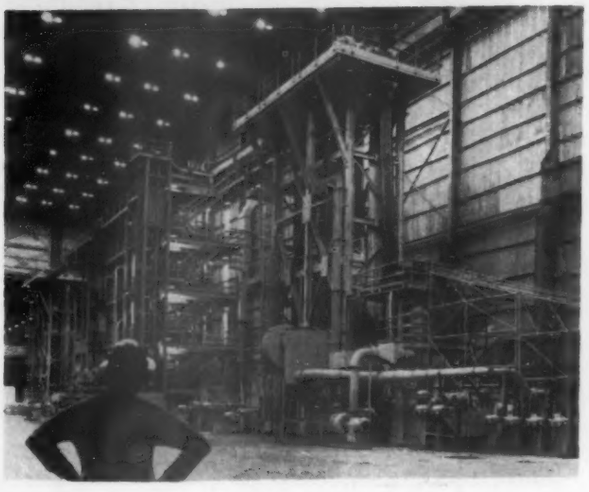
Pennsylvania Truckers Sue 30 Eastern Railroads For "Conspiracy"; Ask $250 Million "Damages"

Thirty eastern railroads and their respective presidents or chief executives have been named as defendants in a suit filed in the United States District Court for the Eastern District of Pennsylvania, by the Pennsylvania Motor Truck Association and 37 long distance commercial truck lines "on behalf of themselves and others similarly situated." The complaint filed with the court to initiate the suit alleges that the plaintiff truck lines "have suffered damages and will in the future suffer loss, damage and injury . . . by reason of the illegal acts and unlawful conspiracy of the defendants," which damages, "when trebled under the anti-trust laws," are alleged to exceed $250 million. The complaint asks "that each and every one of the defendants be required to pay to each of the plaintiffs damages in an amount to be determined at the trial of this action."

The suit—which also names as defendants the Eastern Railroad Presidents Conference, the public relations firm of Carl Byoir & Associates, Inc., T. J. Ross, of the public relations firm of Ivy Lee & T. J. Ross, and John M. Fitzgerald, former vice-chairman of the E.R.P.C.—is brought under the anti-trust laws, and "particularly under Sections 1 and 2 of the Act of July 2, 1890, commonly known as the Sherman Act."

The complaint avers that "the defendant railroads have . . . sought by divers means to obstruct, hamper and impede interstate transportation by motor vehicle . . . to maintain a monopoly . . . by destroying interstate competitive highway transportation through fomenting governmental restrictions and undermining public confidence . . . all to the detriment and irreparable harm and damage to the plaintiffs, the users of their facilities and the economy of Pennsylvania." It further charges the railroads with having "embarked upon an illegal conspiracy in violation of the civil and criminal provisions of the anti-trust laws, aimed at destroying the plaintiffs and those similarly situated, as competitors in the field of the hauling of freight." To carry out this "conspiracy" through the Eastern Railroad Presidents Conference and through "the defendant Byoir" as their publicity agent, the complaint avers that the railroads have indulged in:

(*Continued on next page*)



FAIRLESS WORKS, recently opened by the United States Steel Corporation near Morrisville, Pa., provided the topic for the January 15 meeting of the New York Railroad Club. E. Grosvenor Plowman, vice-president—traffic, of the steel corporation, described "Railroad Transportation at Fairless Works," while F. R. Gammon, assistant vice-president, eastern area, covered "activities and developments of Fairless Works" in an illustrated talk. There followed the first public showing of U. S. Steel's latest motion picture, "New Neighbor," which included views similar to those reproduced here. The picture above is a general view of the big new steel producing facility with blast furnaces visible in the center; at the right is an interior view showing one of the plant's many specialized activities. This one is a continuous annealing line which processes strip steel at a rate of 1,000 feet per minute.

"(a) Bribery of public officials;

"(b) Bribery of the officials in independent organizations;

"(c) Formation of 'independent' citizens organizations to circulate false and malicious propaganda composed and prepared by Byoir for the railroads, attacking the plaintiffs, without disclosing the participation of the railroads;

"(d) Use of existing 'independent' citizens organizations for the same ends;

"(e) Vilification and defamation of the plaintiffs, by the circulation to the public generally, to public officials, and to suppliers and customers of the plaintiffs, of false and malicious reports of and concerning the plaintiffs in their business of hauling freight;

"(f) Unfair competition with the plaintiffs by all of the above means."

It more specifically charges the railroads:

(a) With having, through Byoir, "plotted, created and master-minded" a campaign to cause Governor John S. Fine of Pennsylvania, to veto, in 1952, that state's so-called "Fair Truck Bill," which would have increased Pennsylvania truck weight limits from 45,000 lb. to 60,000 lb.;

(b) With having brought about publication of "a misrepresented and distorted account" of the Maryland road tests;

(c) With having "obtained access to such influential groups as the Pennsylvania State Grange and the Pennsylvania Association of Township Supervisors . . . through corruption of certain of their officials";

(d) With having "approached suppliers and customers of the plaintiffs and disparaged the plaintiffs to them"; and

(e) With "disparaging the plaintiffs' business in the public mind, in creating great public hostility to the plaintiffs, in impeding plaintiffs in the legitimate conduct of their business, in preventing passage of legislation beneficial to the plaintiffs, and in financially damaging the plaintiffs both by increased expense of operation, loss of accounts and loss of profits and prospective profits."

On the basis of those allegations the complaint "demands" that the defendants be "enjoined and restrained from:

"(a) Preparing, composing or publishing any release relating to the plaintiffs or their business without disclosing that it has been prepared, composed or published by or on behalf of the defendant railroads;

"(b) Disseminating any information, disparaging the plaintiffs or their business to any persons or groups without disclosing that the information is being disseminated on behalf of the defendant railroads;

"(c) Employing the defendant Byoir or anyone else to conduct an undercover campaign against the plaintiffs and their business;

"(d) Organizing or using any non-railroad associations as instruments for circulating disparaging information about the plaintiffs or their business;

"(e) Making payments whether by way of salary, expenses, bribes, or of any other nature, to any officials of any public or private organizations to induce them to adopt and propagate the position of the railroads against the plaintiffs or their business;

"(f) Exerting or attempting to exert any pressure on the legislature or governor of the Commonwealth of Pennsylvania through the medium of front organizations, against the plaintiffs or their business;

"(g) Employing any of the devices or techniques described in the complaint for the purpose of injuring the plaintiffs in their business as haulers of long-distance freight;

"(h) Doing any other act or thing to further the combination and conspiracy herein alleged or to accomplish the objects and purposes thereof; and

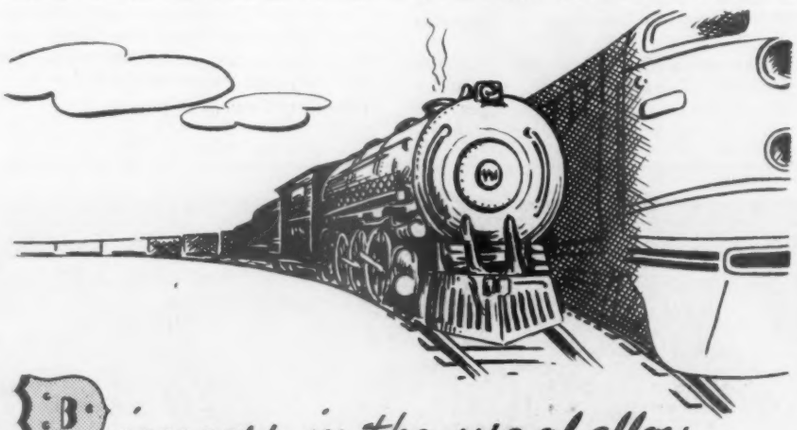
"(i) Combining or conspiring among themselves or with any other person to restrain, restrict, limit or prevent the growth, development, or expansion of the plaintiffs as competitors in interstate commerce with them or any of them, or so combining or conspiring otherwise to restrain, restrict, limit or prevent, the plaintiffs' competition in interstate commerce with them or any of them."

In Reply

"Preliminary or interim relief" is also sought with respect to those specific demands in addition to the monetary damages mentioned above.

Up to the time this issue went to press railroad comment on the suit had been confined to brief statements by David I. Mackie, chairman of the Eastern Railroad Presidents Conference, and Gerry Swinehart, president of Carl Byoir & Associates.

(*Continued on page 52*)



Pioneers in the use of alloy steels in railroad tools!

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REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1952

Name of Road		Average mileage operated during period	Operating Revenues				Operating Expenses										Operating ratio		Net from railway operation	Railway tax accruals	Net railway operating income	
					Total (inc. misc.)		Maint. Way and Structures			Maint. Equipment												
			Freight	Pass.	1952	1951	Total 1952	Total 1951	Deprec. and Retirements	Total 1952	Total 1951	Deprec. and Retirements	Traffic	Transportation	Total 1952	Total 1951	1952	1951				
Akron, Canton & Youngstown	Nov.	171	$477	....	$495	$476	$74	$78	$4	$53	$47	$15	$38	$131	$329	$324	66.4	68.1	$167	$46	$94	$45
	11 mos.	171	5,037	....	5,173	5,274	848	783	71	597	529	171	403	1,494	3,690	3,552	71.3	67.3	1,483	514	753	607
Atchison, Topeka & Santa Fe	Nov.	13,072	41,706	$3,854	49,931	55,766	7,334	7,947	758	8,609	9,520	1,803	1,298	15,598	34,899	37,092	69.9	66.5	15,031	10,146	4,491	7,590
	11 mos.	13,072	445,866	52,468	547,760	519,598	79,564	85,541	7,897	98,783	99,090	18,657	12,723	170,730	384,846	391,543	70.3	75.4	162,914	97,800	62,679	64,553
Atlanta & St. Andrews Bay	Nov.	82	291	2	300	301	36	40	3	21	21	4	9	63	144	140	48.1	46.6	156	77	50	56
	11 mos.	82	3,219	19	3,321	3,295	401	371	31	254	224	46	98	685	1,611	1,515	48.5	46.0	1,711	881	529	557
Atlanta & West Point	Nov.	93	260	46	353	401	44	44	5	60	54	11	15	156	300	295	84.8	73.6	54	33	4	35
	11 mos.	93	3,096	520	4,156	4,143	517	514	58	664	616	124	165	1,797	3,410	3,363	82.0	81.2	746	425	156	165
Western of Alabama	Nov.	133	300	44	384	381	73	52	6	67	60	15	16	135	314	283	81.9	74.2	70	32	31	33
	11 mos.	133	3,341	500	4,292	4,173	569	578	75	749	685	154	172	1,567	3,307	3,232	77.0	77.4	986	537	435	325
Atlantic & Danville	Nov.	205	141	....	145	182	35	46	2	16	18	5	11	55	129	148	88.9	81.3	16	7	—13	8
	11 mos.	205	1,717	....	1,745	1,690	367	367	21	155	126	53	127	581	1,357	1,335	77.8	79.0	388	107	62	75
Atlantic Coast Line	Nov.	5,471	10,952	1,271	13,223	13,064	2,491	1,020	220	3,215	2,693	542	369	4,617	11,260	9,240	85.1	70.7	1,964	600	1,248	1,700
	11 mos.	5,471	123,454	19,314	154,018	143,181	28,288	26,039	1,581	33,220	28,454	5,841	3,962	53,175	125,348	118,126	81.4	82.5	28,670	15,250	10,850	7,888
Charleston & Western Carolina	Nov.	343	507	1	523	519	100	96	6	92	120	42	17	162	382	426	73.1	82.1	141	50	109	41
	11 mos.	343	5,701	28	5,918	5,885	1,420	1,473	51	1,228	969	445	195	1,886	4,874	4,619	82.4	78.5	1,044	455	610	571
Baltimore & Ohio	Nov.	6,187	35,927	1,705	40,260	37,587	5,303	5,454	588	7,742	8,375	987	895	14,784	30,195	30,980	75.0	82.4	10,065	3,826	5,048	3,015
	11 mos.	6,187	356,992	21,967	406,454	412,099	53,062	55,496	4,636	83,050	90,850	10,749	9,553	159,168	321,440	335,988	79.1	81.5	85,014	31,767	42,073	34,339
Staten Island Rapid Tr nsit	Nov.	29	214	51	268	330	66	52	15	27	38	2	1	148	276	281	102.9	85.1	—8	37	—67	—11
	11 mos.	29	2,765	584	3,386	3,292	642	539	127	339	409	21	17	1,670	3,023	2,949	89.3	89.6	363	401	—307	—240
Bangor & Aroostook	Nov.	602	1,146	33	1,221	1,079	191	204	19	235	181	92	16	274	766	738	62.7	68.4	455	239	244	175
	11 mos.	602	10,946	402	11,835	9,885	2,633	2,125	185	2,533	1,947	820	209	3,247	9,281	7,662	78.4	77.5	2,554	1,401	1,536	1,108
Bessemer & Lake Erie	Nov.	212	2,431	....	2,452	2,347	236	241	21	1,009	850	75	19	469	1,826	1,766	74.5	75.2	626	383	504	281
	11 mos.	212	23,956	8	24,191	27,646	2,300	2,232	233	6,930	8,636	1,169	218	5,055	15,591	17,933	64.5	64.9	8,600	5,490	5,453	4,486
Boston & Maine	Nov.	1,683	5,773	855	7,420	7,195	1,214	1,239	209	1,064	1,012	180	112	3,107	5,791	5,901	78.0	82.0	1,630	729	485	409
	11 mos.	1,700	60,839	10,932	81,118	80,212	14,779	14,082	2,093	12,536	12,574	1,929	1,258	34,302	66,441	66,067	81.9	82.4	14,677	7,083	4,014	3,606
Cambria & Indiana	Nov.	35	148	....	149	155	14	12	1	106	89	22	....	19	145	134	97.8	86.2	3	62	75	52
	11 mos.	35	1,433	....	1,434	1,502	209	156	16	925	913	222	1	237	1,455	1,436	101.5	95.6	—21	639	702	587
Canadian Pacific Lines in Maine	Nov.	234	319	49	399	390	133	118	5	92	79	13	8	185	433	399	108.5	102.5	—34	27	—84	—85
	11 mos.	234	4,992	576	5,915	5,578	1,329	1,200	56	1,085	924	109	87	2,443	5,098	4,494	86.2	80.6	817	313	—119	202
Canadian Pacific Lines in Vermont	Nov.	90	209	14	245	234	59	49	4	26	28	....	7	115	216	205	87.8	87.5	30	12	—40	—46
	11 mos.	90	2,106	169	2,502	2,487	752	581	42	329	345	2	73	1,316	2,560	2,383	102.3	95.8	—58	143	—797	—647
Central of Georgia	Nov.	1,786	3,060	158	3,494	3,690	478	741	35	578	543	114	136	1,382	2,765	3,020	79.1	81.8	729	105	572	409
	11 mos.	1,786	33,642	2,302	39,496	39,064	6,379	6,917	473	6,659	6,398	1,183	1,445	16,336	32,979	33,803	83.5	86.5	6,516	2,772	3,232	1,930
Central of New Jersey	Nov.	411	2,904	440	3,631	3,688	578	585	94	573	602	73	61	1,694	3,061	3,206	84.3	86.9	569	394	—287	—297
	11 mos.	411	31,770	5,258	40,327	40,067	5,667	5,659	836	6,655	6,811	845	640	19,666	34,466	35,283	85.5	88.1	5,861	4,405	—2,825	—3,541
Central of Pennsylvania	Nov.	207	1,701	4	1,756	1,762	236	205	38	454	417	76	23	434	1,187	1,194	67.6	67.8	569	86	794	739
	11 mos.	207	17,850	56	18,479	17,984	2,320	1,962	308	4,273	4,282	831	276	5,141	12,470	12,582	67.5	70.0	6,009	1,577	7,479	7,494
Central Vermont	Nov.	422	774	40	884	962	95	68	16	111	154	12	15	392	651	673	73.7	70.0	233	41	129	191
	11 mos.	422	8,600	704	10,048	10,561	1,845	1,870	182	1,560	1,704	136	171	4,517	8,564	8,565	85.2	81.1	1,484	479	373	836
Chesapeake & Ohio	Nov.	5,116	29,736	653	31,732	32,340	3,427	3,871	377	5,280	6,249	1,442	600	9,181	19,748	22,136	62.2	68.4	11,984	5,687	6,839	4,810
	11 mos.	5,116	302,833	7,977	326,380	338,829	44,581	44,092	3,829	64,776	64,044	15,616	6,908	102,266	232,439	238,048	71.2	70.3	93,941	46,538	51,427	46,528
Chicago & Eastern Illinois	Nov.	868	2,581	255	3,133	2,957	486	421	26	588	601	123	121	1,093	2,458	2,354	78.5	79.6	675	206	331	329
	11 mos.	868	25,826	2,927	32,113	30,807	4,196	4,299	316	5,214	4,571	1,300	1,297	11,683	24,266	23,323	75.6	75.7	7,847	2,766	3,867	3,469
Chicago & Illinois Midland	Nov.	130	687	....	707	873	38	111	7	81	136	20	28	226	414	540	58.6	61.9	293	151	112	125
	11 mos.	130	5,989	2	6,193	8,656	633	1,186	80	1,418	1,723	228	312	2,147	4,959	6,083	80.1	70.3	1,234	658	280	880
Chicago & North Western	Nov.	7,987	14,070	1,689	17,568	17,665	2,414	2,562	335	2,892	2,952	762	333	7,744	14,164	14,424	80.6	81.7	3,404	1,097	1,697	1,122
	11 mos.	7,905	146,907	20,565	188,605	186,783	29,634	29,838	3,771	34,225	34,379	8,208	3,843	86,344	163,310	163,959	86.6	87.8	25,295	11,756	7,498	5,890
Chicago, Burlington & Quincy	Nov.	8,866	20,208	1,558	23,999	23,078	3,670	3,468	616	3,119	3,396	713	475	8,262	16,290	15,790	67.9	68.4	7,709	4,324	2,786	2,895
	11 mos.	8,810	202,,27	18,200	245,376	241,943	38,532	38,683	5,045	37,443	35,968	7,699	5,156	86,615	176,662	173,533	72.0	71.7	68,714	37,705	26,243	26,446
Chicago Great Western	Nov.	1,468	3,073	9	3,267	2,954	686	562	39	486	400	119	113	901	2,316	2,091	70.9	70.8	951	328	338	311
	11 mos.	1,468	30,714	173	32,954	31,273	5,671	5,521	460	4,436	4,611	1,307	1,167	10,566	23,116	22,561	70.2	72.1	9,838	3,455	3,383	2,804
Chicago, Indianapolis & Louisville	Nov.	541	1,686	66	1,874	1,849	223	276	22	243	255	65	91	624	1,280	1,363	68.3	73.7	594	205	264	169
	11 mos.	541	17,994	731	20,006	19,606	3,368	3,342	210	2,981	3,040	704	971	6,880	15,251	15,387	76.3	78.4	4,746	1,856	1,704	1,450
Chicago, Milw., St. Paul & Pacific	Nov.	10,635	18,007	1,306	21,735	22,721	3,080	2,490	424	4,093	4,268	861	461	8,913	17,544	17,356	80.7	76.4	4,191	2,019	1,612	2,074
	11 mos.	10,668	203,710	17,058	24,,250	243,079	37,760	34,377	4,323	49,463	47,792	9,684	5,211	100,495	204,376	202,093	83.0	83.1	41,874	21,308	14,257	12,814
Chicago, Rock Island & Pacific	Nov.	7,916	14,587	1,538	17,707	17,636	2,189	1,960	254	2,794	2,463	531	487	6,162	12,464	11,975	70.4	67.9	5,243	2,343	2,317	2,237
	11 mos.	7,916	159,549	18,488	195,181	181,098	25,575	26,888	2,710	31,624	27,989	5,565	5,350	69,683	141,090	139,200	72.3	76.9	54,091	24,047	22,807	14,535
Chic., St. Paul, Minn. & Omaha	Nov.	1,617	2,723	177	3,165	3,019	437	463	41	392	408	90	66	1,434	2,451	2,531	77.4	83.8	714	168	321	352
	11 mos.	1,617	26,641	2,053	31,531	30,847	4,963	5,012	501	4,593	4,641	973	717	15,569	27,250	28,083	86.4	91.0	4,282	1,984	—92	—1,037
Clinchfield	Nov.	317	2,078	1	2,086	2,006	297	233	20	339	285	81	43	433	1,146	1,012	54.9	50.5	940	226	847	928
	11 mos.	317	21,823	14	21,947	21,527	3,375	2,908	207	3,714	3,495	889	463	4,710	12,658	12,020	57.7	55.8	9,289	2,407	8,379	8,930

REVENUES AND EXPENSES OF CLASS I RAILWAYS

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1952

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1952	Total (inc. misc.) 1951	Operating Expenses: Maint. Way and Structures: Total 1952	Total 1951	Deprec. and Retirements	Maint. Equipment: Total 1952	Total 1951	Deprec. and Retirements	Traffic	Transportation	Total 1952	Total 1951	Operating ratio 1952	Operating ratio 1951	Net from railway operation	Railway tax accruals	Net railway operating income 1952	Net railway operating income 1951
Colorado & Southern	Nov.	734	1,350	67	1,556	1,531	109	122	18	191	159	31	29	550	931	867	59.9	56.7	624	140	422	258
	11 mos.	736	12,523	895	14,860	14,715	1,818	1,831	213	2,157	2,108	367	316	5,308	10,216	10,360	68.8	70.4	4,645	2,278	2,152	1,145
Ft. Worth & Denver	Nov.	1,038	1,977	124	2,267	2,281	303	286	34	228	223	28	56	743	1,421	1,419	62.7	62.2	846	157	560	362
	11 mos.	1,038	18,145	1,758	21,680	20,333	3,190	2,911	355	2,668	2,626	332	607	7,745	15,269	14,833	70.4	73.0	6,411	2,129	3,043	2,097
Colorado & Wyoming	Nov.	40	201	....	312	279	16	28	2	36	32	11	1	108	173	190	55.5	67.9	139	76	61	26
	11 mos.	40	1,519	....	2,644	3,020	215	540	27	378	315	113	14	1,012	1,736	2,292	65.6	75.8	907	452	345	261
Columbus & Greenville	Nov.	168	171	....	180	191	33	61	4	29	23	6	4	49	132	158	73.7	82.8	47	40	15	10
	11 mos.	168	1,675	2	1,751	1,882	328	494	40	297	320	66	45	546	1,413	1,624	80.7	86.3	339	302	120	78
Delaware & Hudson	Nov.	793	4,102	136	4,387	4,829	585	538	51	685	999	155	76	1,569	3,123	3,657	71.2	75.7	1,264	643	701	577
	11 mos.	793	48,937	1,886	52,625	54,213	7,763	7,284	937	10,057	11,171	1,571	924	19,241	40,245	41,894	76.5	77.3	12,380	6,376	6,521	5,745
Delaware, Lackawanna & Western	Nov.	958	6,332	786	7,871	7,437	823	826	165	1,280	1,354	296	164	3,211	5,734	5,942	72.9	79.9	2,137	1,119	1,060	821
	11 mos.	962	67,967	8,969	85,270	81,283	9,381	9,101	1,554	15,515	15,086	3,260	1,821	36,179	65,859	65,702	77.2	80.8	19,411	10,371	9,494	7,089
Denver & Rio Grande Western	Nov.	2,333	7,404	268	7,943	7,422	758	542	87	1,088	1,085	251	174	2,239	4,532	4,306	57.0	58.0	3,412	1,783	1,513	1,350
	11 mos.	2,333	68,769	3,225	74,739	70,904	9,455	8,695	1,004	12,465	11,863	2,617	1,913	23,870	50,896	48,043	68.1	67.8	23,843	12,995	10,412	10,585
Detroit & Mackinac	Nov.	232	157	....	159	251	43	75	2	17	21	9	4	36	112	155	70.4	61.8	47	25	27	12
	11 mos.	232	1,820	2	1,863	2,417	473	585	30	225	232	98	48	420	1,284	1,388	68.9	57.5	579	324	284	317
Detroit & Toledo Shore Line	Nov.	50	704	....	730	626	72	90	3	62	51	16	15	200	362	381	49.6	60.8	368	139	122	72
	11 mos.	50	6,877	....	7,037	6,929	842	811	37	655	639	193	157	2,102	3,899	4,022	55.4	58.1	3,138	1,172	976	774
Detroit, Toledo & Ironton	Nov.	474	1,437	....	1,520	1,412	182	195	22	235	429	70	27	413	897	1,097	59.1	77.7	622	302	280	103
	11 mos.	474	15,398	4	16,194	17,102	2,183	2,301	265	3,407	2,962	748	306	4,355	10,829	10,748	66.9	62.8	5,365	2,783	2,341	2,641
Duluth, Missabe & Iron Range	Nov.	569	4,840	1	5,675	3,861	536	575	78	641	708	99	9	2,201	3,436	4,221	60.5	109.3	2,239	1,248	916	—225
	11 mos.	568	40,692	11	47,500	55,327	6,857	6,717	727	7,135	7,818	1,002	102	16,625	32,177	35,130	67.7	63.5	15,323	9,135	5,952	5,205
Duluth, South Shore & Atlantic	Nov.	539	726	6	777	683	102	72	9	135	139	21	23	280	559	486	71.9	71.1	218	30	120	137
	11 mos.	539	6,997	78	7,470	7,477	1,452	1,329	97	1,525	1,403	223	259	2,746	6,190	6,071	82.9	81.2	1,280	326	534	685
Duluth, Winnipeg & Pacific	Nov.	175	470	1	480	463	—19	37	4	67	66	3	5	198	259	318	53.9	68.6	221	37	121	70
	11 mos.	175	5,329	12	5,415	4,695	846	808	46	850	787	24	57	2,364	4,194	3,755	77.6	80.0	1,221	410	140	54
Elgin, Joliet & Eastern	Nov.	236	3,870	....	4,727	4,588	288	374	25	711	667	102	31	1,663	2,834	2,849	60.0	62.1	1,893	769	586	304
	11 mos.	236	35,226	....	44,120	50,441	3,567	4,698	319	7,349	7,273	1,102	364	16,139	29,075	31,868	65.9	63.2	15,045	5,970	3,498	3,595
Erie	Nov.	2,242	13,449	585	15,116	15,430	1,730	1,614	316	2,097	2,087	491	340	6,090	10,894	10,755	72.1	69.7	4,222	1,851	1,910	2,340
	11 mos.	2,242	141,279	6,872	161,372	164,122	21,975	21,522	2,770	24,317	21,500	5,199	3,860	65,946	123,104	124,223	76.3	75.7	38,268	16,657	16,622	17,692
Florida East Coast	Nov.	571	1,792	386	2,390	2,540	427	399	41	514	429	75	75	873	2,036	1,934	85.2	76.1	354	171	52	318
	11 mos.	571	21,118	6,621	30,576	26,894	4,005	3,847	454	5,534	4,808	831	816	11,198	23,525	21,684	76.9	80.6	7,050	1,878	3,503	1,964
Georgia Railroad	Nov.	323	669	16	754	797	107	123	9	119	109	28	35	326	622	615	82.5	77.2	132	37	122	171
	11 mos.	323	7,788	366	8,875	8,863	1,299	1,311	95	1,404	1,329	294	368	3,721	7,183	6,888	80.9	77.7	1,692	426	1,481	1,676
Georgia & Florida	Nov.	360	322	....	326	247	79	63	4	37	37	7	18	89	238	211	73.1	85.5	88	19	42	1
	11 mos.	360	3,435	....	3,482	3,127	992	866	39	403	368	81	212	1,040	2,815	2,555	80.8	81.7	667	210	172	158
Grand Trunk Western	Nov.	952	4,374	246	5,023	4,393	771	559	49	878	750	90	72	2,134	4,025	3,661	80.1	83.3	998	326	274	230
	11 mos.	952	44,795	2,455	51,093	52,031	8,386	8,074	546	9,296	9,038	997	801	23,080	43,457	42,785	85.1	82.2	7,636	3,397	969	2,579
Canadian Natl. Lines in New Engl.	Nov.	172	95	5	153	223	73	84	9	8	66	....	3	134	242	293	158.0	131.4	—89	24	—149	—135
	11 mos.	172	1,735	95	2,278	2,537	808	706	101	699	559	2	30	1,497	3,251	2,961	142.7	116.7	—973	259	—1,691	—1,199
Great Northern	Nov.	8,325	19,524	931	22,230	20,877	2,943	2,949	347	3,647	3,461	697	370	7,418	15,175	15,019	68.3	71.9	7,055	3,815	2,944	2,521
	11 mos.	8,315	208,932	12,838	230,984	230,069	40,685	39,585	3,690	40,705	37,771	7,175	4,267	79,540	174,146	169,735	72.6	73.8	65,838	35,707	25,634	22,359
Green Bay & Western	Nov.	224	298	....	305	327	—20	—14	4	44	48	8	26	81	147	152	48.0	46.5	159	83	61	81
	11 mos.	224	3,233	....	3,327	3,739	689	967	54	434	474	143	224	938	2,452	2,770	73.7	74.1	875	458	223	419
Gulf, Mobile & Ohio	Nov.	2,766	7,299	366	8,241	7,244	1,299	1,146	74	1,339	1,215	250	289	2,381	5,727	5,249	69.5	66.1	2,513	1,066	898	1,053
	11 mos.	2,796	74,891	4,428	84,829	80,295	13,239	13,137	957	14,704	14,600	2,668	2,903	24,177	58,943	58,338	69.5	72.7	25,887	11,995	9,898	8,442
Illinois Central	Nov.	6,539	23,268	1,789	27,899	25,780	3,734	3,862	343	4,404	4,125	745	512	9,021	18,625	18,904	66.8	73.3	9,274	5,248	3,719	2,558
	11 mos.	6,539	230,390	20,634	278,860	267,333	43,038	43,635	3,922	46,187	46,142	8,115	5,427	98,496	204,288	205,570	73.3	76.9	74,572	41,448	28,688	26,088
Illinois Terminal	Nov.	447	857	77	1,042	1,017	146	150	27	146	155	36	41	414	801	818	76.8	89.5	242	122	76	76
	11 mos.	451	9,747	856	11,922	11,624	1,689	1,712	292	1,756	1,695	381	448	4,722	9,220	9,056	77.3	77.9	2,703	1,358	944	942
Kansas City Southern	Nov.	891	3,519	106	4,026	3,967	424	485	41	479	432	91	95	1,146	2,269	2,200	56.3	55.5	1,758	769	659	593
	11 mos.	891	38,024	1,561	43,351	40,476	4,618	4,221	370	5,233	4,904	961	957	12,337	24,515	23,299	56.6	57.6	18,836	8,792	7,358	6,755
Kansas, Oklahoma & Gulf	Nov.	327	636	....	642	593	115	80	6	39	37	9	26	140	344	311	53.5	52.4	298	97	156	112
	11 mos.	327	6,676	6	6,740	6,093	1,160	824	67	414	378	97	288	1,400	3,527	3,073	52.3	50.4	3,213	1,549	1,245	1,224
Lake Superior & Ishpeming	Nov.	156	404	....	492	373	48	52	9	49	57	12	2	124	234	271	47.6	72.8	258	15	271	122
	11 mos.	156	3,251	....	3,960	4,396	573	633	103	602	550	123	22	1,009	2,338	2,568	59.0	58.4	1,622	857	881	847
Lehigh & Hudson River	Nov.	96	299	....	300	282	38	44	6	39	28	9	13	102	204	177	62.0	62.8	96	5	64	70
	11 mos.	96	3,027	....	3,035	3,031	473	466	30	332	286	94	142	940	2,000	1,888	65.9	62.3	1,035	388	434	500
Lehigh & New England	Nov.	184	810	....	816	783	80	68	8	125	112	38	16	217	471	429	57.7	54.7	345	198	188	161
	11 mos.	184	8,265	....	8,339	8,286	887	1,043	72	1,440	1,245	412	135	2,165	5,010	4,905	60.1	59.2	3,329	1,983	1,910	1,700
Lehigh Valley	Nov.	1,218	5,991	310	6,618	6,945	842	781	134	979	1,143	205	136	2,396	4,595	4,787	69.4	68.9	2,023	788	1,141	1,169
	11 mos.	1,219	64,778	3,527	72,103	72,203	9,006	9,483	991	11,541	12,927	2,130	1,526	27,306	52,121	54,750	72.3	75.8	19,983	8,721	10,742	9,568
Long Island	Nov.	365	1,119	2,885	4,247	4,699	579	612	86	771	772	121	12	2,126	3,648	3,892	85.9	82.8	599	489	—163	60
	11 mos.	365	12,548	33,550	48,694	49,742	6,736	6,581	947	8,648	9,130	1,309	166	25,111	42,486	43,524	87.3	87.5	6,208	5,384	—1,856	—1,547

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1952

Name of Road		Average mileage operated during period	Operating Revenues				Operating Expenses									Operating ratio		Net from railway operation	Railway tax accruals	Net railway operating income	
							Maint. Way and Structures			Maint. Equipment											
			Freight	Pass.	Total (inc. misc.) 1952	Total (inc. misc.) 1951	Total 1952	Total 1951	Deprec. and Retirements	Total 1952	Total 1951	Deprec. and Retirements	Traffic	Transportation	Total 1952	Total 1951	1952	1951				
Louisiana & Arkansas	Nov.	756	2,085	48	2,234	2,210	356	232	19	285	313	90	71	588	1,372	1,235	61.4	55.9	862	361	445	432
	11 mos.	756	22,556	671	24,147	21,998	4,047	3,900	221	3,003	2,749	840	779	6,403	15,034	14,420	62.3	65.6	9,113	3,944	4,325	2,806
Louisville & Nashville	Nov.	4,738	16,223	960	18,427	20,152	2,524	2,537	237	3,835	4,320	722	347	6,743	14,053	14,694	76.3	72.9	4,375	2,739	2,339	2,192
	11 mos.	4,760	178,981	12,366	205,870	205,872	29,874	28,991	2,516	44,350	43,836	7,466	3,701	73,685	158,752	159,881	77.1	77.7	47,117	30,145	24,147	20,414
Maine Central	Nov.	945	1,866	102	2,121	2,110	401	397	48	389	403	72	24	770	1,664	1,679	78.5	79.6	457	247	188	170
	11 mos.	962	21,299	1,420	24,539	23,907	4,917	4,600	406	4,212	4,182	752	229	8,658	18,884	18,089	77.0	75.7	5,655	2,859	2,376	2,334
Midland Valley	Nov.	334	163	....	167	185	42	48	6	17	27	2	5	60	130	150	78.3	80.7	36	17	6	17
	11 mos.	334	1,894	....	1,928	1,926	529	532	77	211	200	27	54	688	1,557	1,511	80.8	78.5	371	169	96	112
Minneapolis & St. Louis	Nov.	1,397	1,936	4	2,032	1,945	318	215	20	247	262	75	128	649	1,446	1,292	71.1	66.4	586	286	243	244
	11 mos.	1,404	20,026	77	20,877	20,178	3,618	3,530	316	3,056	2,906	816	1,322	6,729	15,893	15,374	76.1	76.2	4,984	2,590	1,954	1,493
Minn., St. Paul & Sault Ste. Marie	Nov.	3,223	2,855	74	3,166	3,735	888	790	47	711	610	99	67	1,459	3,241	2,983	102.4	79.9	—75	71	—157	401
	11 mos.	3,224	36,106	1,022	39,404	38,676	8,630	7,851	521	7,298	7,035	1,040	824	15,149	33,269	32,131	84.4	83.1	6,134	3,666	2,091	2,838
Mississippi Central	Nov.	148	202	....	205	232	54	52	2	26	28	3	14	64	168	161	82.0	69.3	37	19	9	24
	11 mos.	148	2,413	—1	2,452	2,410	552	485	24	323	315	36	144	716	1,844	1,681	75.2	69.8	608	308	188	253
Missouri Illinois	Nov.	172	511	....	516	405	112	88	4	55	72	20	9	149	338	299	65.4	73.8	178	130	54	55
	11 mos.	172	4,959	2	5,005	4,874	905	757	42	766	722	224	94	1,365	3,240	2,974	64.7	61.0	1,766	1,060	790	766
Missouri-Kansas-Texas Lines	Nov.	3,242	6,482	293	7,377	7,213	1,127	961	147	1,212	909	224	250	2,412	5,307	4,908	71.9	68.1	2,070	536	1,193	885
	11 mos.	3,242	67,368	3,923	77,804	71,409	11,312	10,719	1,384	11,380	10,323	2,458	2,783	26,961	55,915	54,459	71.9	76.3	21,889	9,005	9,551	6,083
Missouri Pacific	Nov.	6,950	18,608	914	21,533	20,965	4,150	3,573	267	4,100	3,872	741	470	7,404	16,736	16,307	77.7	77.8	4,797	1,874	2,282	2,453
	11 mos.	6,950	193,607	11,304	226,892	217,081	38,534	38,498	3,082	42,829	42,097	7,799	5,021	81,010	174,441	175,442	76.9	80.8	52,451	20,302	25,933	21,352
International-Great Northern	Nov.	1,104	2,746	157	3,153	3,168	625	633	36	619	556	104	60	1,159	2,586	2,619	82.0	82.7	568	84	319	302
	11 mos.	1,104	29,642	2,102	34,790	34,956	7,113	7,113	384	6,261	5,966	1,113	642	13,259	28,720	28,943	82.6	82.8	6,070	1,432	3,155	2,866
Gulf Coast Lines	Nov.	1,723	3,258	84	3,570	3,727	816	725	38	538	512	99	86	1,146	2,717	2,702	76.1	72.5	852	225	449	336
	11 mos.	1,724	36,839	1,013	40,366	40,120	8,422	8,031	459	6,062	6,003	1,043	974	12,935	29,967	29,976	74.2	74.7	10,399	3,579	4,870	4,079
Monongahela	Nov.	178	663	....	680	812	82	85	10	80	87	8	1	236	404	499	59.5	61.5	276	Cr 33	165	78
	11 mos.	178	6,988	....	7,045	8,298	966	998	122	865	970	83	11	2,640	4,574	4,995	64.9	60.2	2,471	343	583	929
Montour	Nov.	51	242	....	243	276	23	18	3	73	100	17	1	82	189	229	77.8	82.9	54	74	57	55
	11 mos.	51	2,129	....	2,133	2,500	250	312	28	797	989	178	10	875	2,036	2,404	95.5	96.2	97	474	452	342
Nashville, Chatt. & St. Louis	Nov.	1,032	2,849	133	3,446	3,500	543	530	40	422	487	93	124	1,108	2,324	2,390	67.4	68.3	1,123	569	574	429
	11 mos.	1,032	31,751	1,693	37,537	35,090	6,405	6,256	514	5,128	5,200	1,245	1,272	12,588	26,728	26,367	71.2	75.1	10,810	5,423	5,455	3,388
New York Central	Nov.	10,718	49,931	9,493	68,119	71,906	9,150	8,404	869	13,138	14,299	2,316	1,079	28,650	55,231	57,973	81.1	80.6	12,889	5,224	5,899	6,599
	11 mos.	10,714	527,233	111,791	731,240	738,949	105,243	99,704	10,162	148,774	151,361	24,961	11,782	319,475	620,427	634,990	84.8	85.9	110,813	57,023	42,634	31,156
Pittsburgh & Lake Erie	Nov.	221	3,972	76	4,467	3,842	482	426	41	1,127	1,569	253	70	1,355	3,265	3,651	73.1	95.0	1,201	982	1,098	338
	11 mos.	221	38,256	820	41,343	45,108	5,246	5,548	618	11,553	14,808	2,673	794	14,393	34,473	39,309	83.4	87.1	6,870	6,643	9,148	6,295
New York, Chicago & St. Louis	Nov.	2,184	14,172	137	14,844	13,953	1,404	1,611	142	2,377	2,246	334	309	5,158	9,660	9,379	65.1	67.2	5,184	2,637	2,171	2,098
	11 mos.	2,185	141,306	1,882	148,407	147,553	17,363	16,782	1,539	23,359	24,210	3,629	3,365	51,267	100,188	100,803	67.5	68.3	48,218	24,616	20,889	20,981
New York, New Haven & Hartford	Nov.	1,792	8,336	4,054	13,864	13,660	1,982	1,802	267	1,954	2,131	376	173	5,627	10,404	10,405	75.0	76.2	3,460	960	1,510	1,107
	11 mos.	1,793	85,108	46,788	148,391	143,437	22,558	21,810	2,993	23,031	23,452	4,111	2,104	62,776	118,318	116,432	79.7	81.2	30,073	11,282	9,318	6,392
New York Connecting	Nov.	21	342	....	368	234	93	85	25	23	18	....	....	83	202	162	54.9	69.1	166	80	87	14
	11 mos.	21	3,294	....	3,596	2,935	1,062	1,227	275	282	202	....	....	893	2,269	2,303	63.1	78.5	1,327	899	529	—84
New York, Ontario & Western	Nov.	541	584	....	597	580	110	114	22	76	84	23	24	254	497	516	83.3	88.9	100	26	7	—34
	11 mos.	541	6,230	62	6,504	6,717	1,348	1,289	250	908	951	251	278	2,895	5,770	5,983	88.7	89.1	734	393	—370	—403
New York, Susquehanna & Western	Nov.	120	436	37	501	449	54	51	6	58	63	11	10	209	354	337	70.7	74.9	147	31	71	51
	11 mos.	120	4,490	421	5,175	4,982	630	603	61	651	611	123	100	2,238	3,904	3,694	75.4	74.1	1,271	344	509	522
Norfolk & Western	Nov.	2,135	16,372	407	17,432	18,113	2,283	2,290	284	2,630	3,038	599	329	4,859	10,784	11,643	61.9	64.3	6,647	4,335	3,396	2,648
	11 mos.	2,135	166,034	4,912	179,530	188,440	25,996	24,800	3,391	37,624	36,475	6,489	3,314	53,177	127,070	126,714	70.8	67.2	52,460	36,564	25,838	27,501
Norfolk Southern	Nov.	643	892	....	906	1,102	207	1 207	14	126	126	28	48	276	741	768	81.8	69.6	165	58	54	104
	11 mos.	643	10,535	....	10,702	10,595	2,207	1,996	147	1,312	1,300	264	526	3,330	8,248	7,993	77.1	75.4	2,454	1,099	834	773
Northern Pacific	Nov.	6,882	12,769	539	14,344	15,065	1,906	2,017	226	2,715	2,675	408	384	5,614	11,285	11,702	78.7	77.7	3,059	1,445	2,009	1,828
	11 mos.	6,883	142,902	6,434	161,917	157,770	26,639	24,986	3,025	31,332	30,507	4,471	3,412	61,315	130,322	126,145	80.5	80.0	31,596	20,191	14,654	14,130
Northwestern Pacific	Nov.	331	1,022	7	1,062	1,029	243	266	15	100	104	4	6	564	929	806	87.5	78.3	132	113	—137	26
	11 mos.	331	11,885	73	12,326	10,781	2,931	2,571	193	1,179	1,086	46	61	4,915	9,271	8,493	75.2	78.8	3,054	1,486	245	370
Oklahoma City-Ada-Atoka	Nov.	132	71	....	72	110	18	22	2	2	2	....	2	25	51	50	69.9	45.7	22	22	—13	25
	11 mos.	132	1,034	....	1,043	1,091	244	247	28	41	50	....	20	254	605	593	58.0	54.3	438	213	102	169
Pennsylvania	Nov.	10,120	71,792	11,578	92,401	87,623	9,861	10,095	1,175	21,212	20,832	3,128	1,325	37,500	73,376	74,187	79.4	84.7	19,025	8,668	8,569	6,952
	11 mos.	10,120	700,951	142,156	937,914	951,363	119,167	118,258	14,531	210,483	232,844	30,966	14,448	404,523	785,740	814,256	83.8	85.6	152,174	67,910	68,057	55,614
Pennsylvania-Reading Seashore Lines	Nov.	364	652	111	791	802	223	205	42	102	92	15	9	537	901	886	113.9	110.6	—110	128	—386	—307
	11 mos.	364	6,835	2,163	9,340	9,776	2,337	2,371	292	1,082	1,049	168	119	6,364	10,296	10,488	110.2	107.3	—956	1,327	—3,726	—3,317

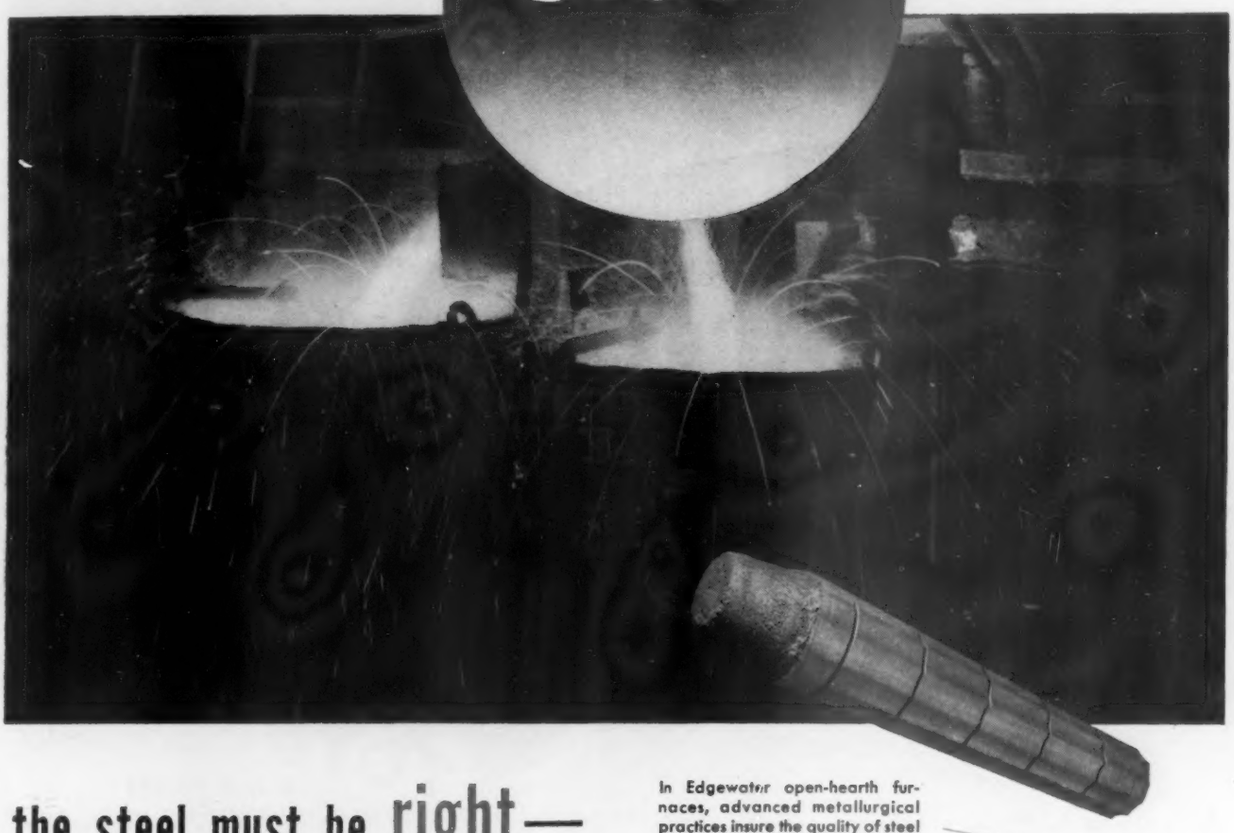
REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1952

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1952	Total (inc. misc.) 1951	Operating Expenses: Maint. Way and Structures: Total 1952	Total 1951	Deprec. and Retirements	Maint. Equipment: Total 1952	Total 1951	Depr. and Retirements	Traffic	Transportation	Total 1952	Total 1951	Operating ratio 1952	Operating ratio 1951	Net from railway operation	Railway tax accruals	Net railway operating income 1952	Net railway operating income 1951
Pittsburg & Shawmut	Nov.	97	211	....	211	189	40	31	7	48	46	9	3	58	159	142	75.2	75.0	53	31	46	89
	11 mos.	97	2,047	....	2,057	2,191	407	378	47	558	557	97	38	561	1,666	1,673	80.9	76.4	391	120	576	506
Pittsburgh & West Virginia	Nov.	132	758	....	766	708	113	133	23	162	195	36	54	191	554	596	72.4	84.1	211	119	137	84
	11 mos.	132	7,700	....	7,811	8,035	1,316	1,559	260	1,872	1,999	385	570	2,023	6,085	6,573	77.9	81.8	1,726	966	1,198	1,116
Reading	Nov.	1,320	10,800	564	12,024	11,373	1,814	1,582	411	2,179	2,200	431	153	4,135	8,649	8,665	71.9	76.2	3,375	1,714	1,708	1,344
	11 mos.	1,321	106,496	6,293	120,212	118,535	17,846	18,335	2,765	23,424	24,402	4,487	1,674	45,478	92,715	95,054	77.1	80.2	27,498	14,475	14,419	12,018
Richmond, Fredericksburg & Potomac	Nov.	118	1,438	423	2,151	2,180	340	361	31	293	287	—54	21	654	1,425	1,478	66.3	67.8	726	429	214	209
	11 mos.	118	16,123	6,336	25,773	24,644	3,782	3,327	269	3,336	3,092	599	233	7,763	16,634	16,077	64.5	65.2	9,139	5,036	2,957	2,688
Rutland	Nov.	397	370	14	447	464	63	84	10	75	74	14	18	217	399	437	89.1	94.3	49	29	—1	—24
	11 mos.	397	4,197	208	5,212	5,413	859	911	106	878	906	158	214	2,563	4,792	4,997	91.9	92.3	420	322	—98	—146
Sacramento Northern	Nov.	271	425	....	431	324	51	47	4	14	18	4	2	84	161	167	37.3	51.5	271	14	228	118
	11 mos.	271	2,953	....	3,048	3,228	708	583	85	164	285	45	24	994	1,995	2,017	65.4	62.5	1,054	164	645	795
St. Louis-San Francisco	Nov.	4,601	10,020	485	11,378	10,386	1,700	1,721	144	1,834	1,759	466	305	3,700	7,961	7,989	70.0	76.9	3,417	1,541	1,779	1,019
	11 mos.	4,601	101,565	6,281	117,239	112,719	18,452	18,881	1,900	19,332	19,218	5,232	3,284	41,690	88,117	88,912	75.2	78.9	29,123	13,892	15,030	10,641
St. Louis, San Francisco & Texas	Nov.	159	366	6	409	421	55	48	3	41	33	1	22	148	279	249	68.3	59.1	130	48	33	39
	11 mos.	159	4,600	73	5,008	4,445	552	557	57	405	399	11	230	1,692	3,010	2,976	60.1	66.9	1,998	734	675	330
St. Louis Southwestern Lines	Nov.	1,569	5,758	30	6,008	5,855	790	717	64	619	533	105	177	1,637	3,397	3,293	56.5	56.3	2,611	1,100	1,277	697
	11 mos.	1,569	64,002	394	67,054	63,762	8,220	8,100	712	7,023	7,401	1,068	1,841	18,367	37,536	39,136	56.0	61.4	29,518	15,151	11,901	8,088
Seaboard Air Line	Nov.	4,080	10,833	865	12,643	11,649	1,783	1,803	181	2,426	2,195	649	372	4,014	9,120	8,934	72.1	76.7	3,523	1,541	1,826	1,332
	11 mos.	4,139	121,607	13,831	146,158	135,438	21,488	21,921	1,927	26,598	23,766	6,503	4,044	46,924	105,062	101,356	71.9	74.8	41,095	18,677	20,379	15,327
Southern	Nov.	6,306	19,658	1,064	22,518	21,752	3,390	3,979	841	3,615	3,968	757	427	7,221	15,520	16,673	68.9	76.6	6,998	2,651	4,158	1,952
	11 mos.	6,306	209,473	18,480	246,670	237,058	33,029	33,467	3,586	44,668	46,430	8,314	4,797	81,213	173,684	177,074	70.4	74.7	72,986	38,135	31,590	23,377
Alabama Great Southern	Nov.	326	1,503	54	1,701	1,598	265	226	53	306	359	70	30	462	1,121	1,235	65.9	77.3	580	256	367	105
	11 mos.	326	15,370	999	17,879	18,050	2,644	3,439	267	4,076	4,386	872	369	5,578	13,369	15,003	74.8	83.1	4,510	2,727	1,737	979
Cinn., New Orleans & Texas Pacific	Nov.	337	3,810	116	4,139	3,447	456	433	39	798	893	183	71	913	2,364	2,433	57.1	70.6	1,775	1,017	928	447
	11 mos.	337	36,714	2,198	41,130	40,140	5,070	4,860	405	9,293	9,331	1,975	782	10,699	27,243	27,063	66.2	67.4	13,887	8,993	6,164	5,271
Georgia Southern & Florida	Nov.	397	694	38	802	643	149	193	8	59	61	8	8	209	439	482	54.8	75.0	363	124	100	23
	11 mos.	397	6,711	900	8,352	7,580	1,741	1,743	88	763	737	101	88	2,509	5,309	5,172	63.6	68.2	3,044	961	771	535
New Orleans & Northeastern	Nov.	203	1,077	36	1,172	1,059	143	91	15	116	113	27	19	214	546	495	46.6	46.7	626	405	209	168
	11 mos.	203	10,044	620	11,360	12,057	1,696	1,569	171	1,387	1,411	300	210	2,526	6,330	6,432	55.7	53.3	5,030	3,254	1,608	1,752
Southern Pacific	Nov.	8,113	37,200	3,051	42,980	46,918	4,416	4,846	444	8,613	9,094	1,602	824	16,816	32,578	32,699	75.8	69.7	10,402	4,663	4,236	5,796
	11 mos.	8,118	430,103	40,543	506,266	472,983	57,193	52,973	5,647	100,825	97,613	17,074	9,113	189,086	378,496	361,489	74.8	76.4	127,770	63,227	52,991	41,038
Texas & New Orleans	Nov.	4,292	11,040	606	12,434	13,088	1,971	1,613	532	1,579	1,879	88	269	4,244	8,637	8,647	69.5	66.1	3,797	1,713	1,193	1,600
	11 mos.	4,291	118,664	7,767	135,478	127,437	20,676	19,594	1,862	18,656	19,318	962	2,836	47,418	95,736	96,111	70.7	75.4	39,742	17,548	12,329	8,902
Spokane International	Nov.	152	208	1	225	228	36	59	7	21	25	8	5	69	140	154	62.4	67.7	84	23	39	34
	11 mos.	152	2,538	11	2,695	2,417	648	622	29	241	223	89	55	736	1,795	1,639	66.6	67.8	900	250	462	343
Spokane, Portland & Seattle	Nov.	944	2,331	78	2,568	2,402	368	580	64	303	314	90	26	780	1,560	1,736	60.8	72.3	1,007	410	563	295
	11 mos.	939	25,898	1,046	28,645	28,060	4,544	4,645	630	3,631	3,400	1,014	307	8,720	18,214	17,668	63.6	63.0	10,431	3,805	5,652	5,340
Tennessee Central	Nov.	286	473	3	503	482	94	96	5	60	67	20	12	162	349	351	69.4	72.9	154	45	54	63
	11 mos.	286	4,668	36	4,985	4,786	1,014	1,001	56	713	750	214	130	1,598	3,695	3,703	74.1	77.4	1,290	410	474	431
Texas & Northern	Nov.	8	114	....	126	114	5	1	....	9	9	2	1	34	53	49	41.9	42.9	73	37	19	19
	11 mos.	8	1,078	....	1,202	1,303	60	134	1	102	130	26	11	275	501	656	41.7	50.3	701	353	208	181
Texas & Pacific	Nov.	1,834	6,356	316	7,270	6,684	846	845	97	1,067	1,074	251	178	2,136	4,540	4,554	62.4	68.1	2,730	908	1,491	1,066
	11 mos.	1,834	65,362	4,243	75,921	70,716	10,392	9,608	1,163	12,311	10,977	2,747	1,987	23,592	51,954	49,415	68.4	69.9	23,967	9,067	11,730	8,899
Texas Mexican	Nov.	162	302	....	322	252	60	90	5	27	30	9	9	92	210	202	65.1	79.8	112	60	28	5
	11 mos.	162	3,042	....	3,243	3,041	754	790	66	364	374	92	93	726	2,155	2,140	66.4	70.4	1,089	487	352	285
Toledo, Peoria & Western	Nov.	239	673	....	683	547	108	75	6	30	38	10	49	124	344	327	50.4	59.8	339	158	130	83
	11 mos.	239	6,310	....	6,410	6,220	1,106	1,052	68	490	423	102	492	1,418	3,884	3,792	60.6	60.9	2,526	1,163	875	828
Union Pacific	Nov.	9,831	38,757	2,548	44,551	44,540	5,358	5,142	561	8,078	7,561	1,197	904	16,340	32,786	31,671	73.6	71.1	11,765	6,818	3,277	4,360
	11 mos.	9,849	398,618	35,952	471,201	460,478	67,279	61,521	6,002	84,963	85,108	12,922	9,909	167,308	353,809	344,671	75.1	74.9	117,392	72,725	28,418	30,837
Utah	Nov.	110	174	....	174	187	10	9	2	41	48	9	1	55	115	146	66.2	77.7	59	7	56	38
	11 mos.	110	1,357	....	1,360	1,225	255	173	23	494	512	80	9	603	1,446	1,338	106.3	109.2	—86	105	—63	—91
Virginian	Nov.	611	3,875	2	3,967	4,473	358	570	65	828	991	177	40	876	2,172	2,684	54.8	60.0	1,775	1,093	951	880
	11 mos.	611	39,019	21	40,474	43,171	5,100	5,162	648	9,407	9,497	1,902	497	9,446	25,459	25,486	62.9	59.0	15,015	9,265	7,713	8,320
Wabash	Nov.	2,393	9,068	387	10,214	9,289	1,153	1,198	120	1,236	1,171	354	289	3,982	7,026	6,831	68.8	73.5	3,187	1,208	1,281	796
	11 mos.	2,393	92,965	4,659	105,701	101,152	13,798	14,667	1,250	13,968	13,085	3,778	3,165	42,703	77,668	76,616	73.5	75.7	28,032	11,535	11,333	8,086
Ann Arbor	Nov.	294	680	4	694	738	95	81	15	120	113	30	25	322	580	572	83.6	77.5	114	41	51	58
	11 mos.	294	6,712	10	6,834	8,522	1,151	1,086	187	1,270	1,171	329	279	2,936	5,839	6,304	85.4	74.0	995	368	521	829
Western Maryland	Nov.	836	4,162	7	4,404	4,100	496	413	45	695	834	171	84	1,333	2,796	2,701	63.5	65.9	1,609	868	963	790
	11 mos.	836	40,741	103	43,122	43,640	5,117	5,749	570	8,716	8,808	1,878	956	13,631	30,442	30,816	70.6	70.6	12,680	7,390	7,863	7,454
Western Pacific	Nov.	1,193	5,208	173	5,478	5,082	815	697	100	611	635	121	172	1,267	3,081	2,864	56.2	56.4	2,397	1,288	1,001	921
	11 mos.	1,193	47,148	2,890	51,245	50,806	8,797	6,942	908	7,100	7,210	1,258	2,039	14,843	35,351	32,893	69.0	64.7	15,893	8,248	6,464	7,005
Wisconsin Central	Nov.	1,046	2,438	34	2,641	2,847	313	343	35	412	536	62	62	1,083	1,971	2,233	74.6	78.4	671	291	179	336
	11 mos.	1,046	26,399	491	28,617	28,654	4,005	4,089	395	4,724	5,008	712	755	11,803	22,434	22,952	78.4	80.1	6,182	1,930	2,546	2,233

for Edgewater rolled steel Wheels...



the steel must be right—

...so we make it ourselves!

Quality is first—tonnage second—in the daily operation of Edgewater Open Hearth Furnaces. Every step of the melting and refining process is closely watched and controlled. Ingots are bottom-poured, as in the best ordnance steel practice and are carefully cooled to set up desirable structure in the steel.

Only by such exacting care can we be sure of having the quality of steel needed to produce rolled steel wheels that will meet the exacting specifications of AAR.

In Edgewater open-hearth furnaces, advanced metallurgical practices insure the quality of steel needed to meet the exacting requirements of the railroads.

After the ingot shown above has been carefully cooled, it is "sliced" into blocks, which are weighed, inspected and reheated for forging.

In the forging presses, blocks become blanks, and begin to look like wheels. They then go to the rolling mill, where rim, plate and flange are formed.

After the final rolling operation, the wheels are machined to the dimensions called for by AAR specifications.

Edgewater Steel Company

PITTSBURGH, PENNA.

MAKERS OF ROLLED STEEL TIRES, WHEELS and DRAFT GEARS

Now . . . 2 New
AO COVERGLAS GOGGLES
Fit Over Safety And Personal Glasses

NEW
Safety Goggles

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#327

NEW — 4 WAYS!

1. New Cup Size and Shape
2. New Lens Size and Shape
3. New Side Shields
4. New Easy Lens Replacement

AO's newest development in eye protection—Chippers' and Welders' Coverglas Goggles—can be worn over practically every pair of personal glasses (even the biggest frames) and most types of safety prescription goggles *with and without side shield.*

Wider vision, too, because the lenses are larger and scientifically designed to give up to 20% more vision. Yet, with all these features the goggles weigh but a fraction of an ounce more than ordinary Coverglas goggles . . . cost only slightly more.

These goggles are the newest . . . and two of the greatest . . . developments since the advent of safety goggles. Get all the facts about these two outstanding Coverglas goggles from your AO Safety Products Representative. He can supply you.

QUICK FACTS

- Lens easily replaceable from rear (not front) by means of a spring clamp—no tools needed
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- Light-tight side shields for welders (on No. 327 goggle) provide indirect ventilation
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- AO worker-lab tests show much greater field of vision and increased comfort
- All-rubber headband, easily adjustable

"326" Chippers' Coverglas goggle supplied with regular Super Armorplate lenses. "327" Welders' Coverglas goggle supplied with regular Noviweld lenses and cover lenses.

AO's Industrial Vision Program Increases Production, Decreases Accidents. Write today for booklet "Improved Industrial Vision" to 1011 Vision Park, Southbridge, Mass.

American Optical
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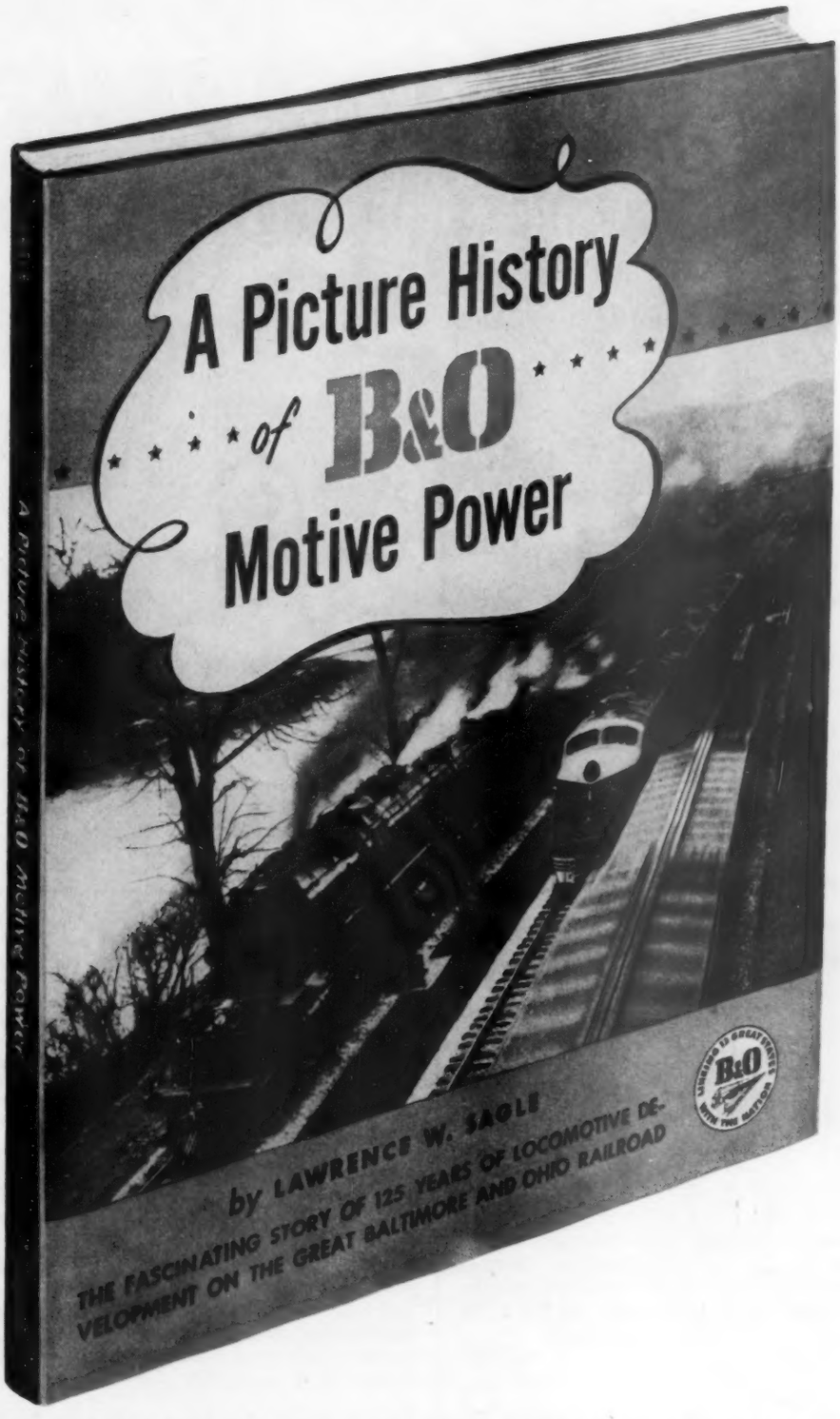
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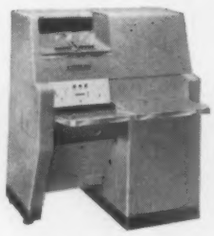

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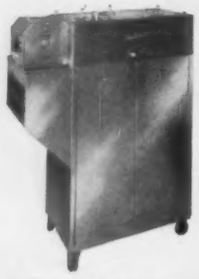

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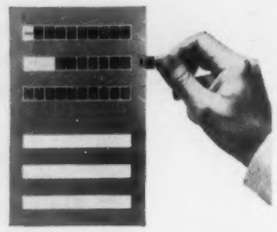

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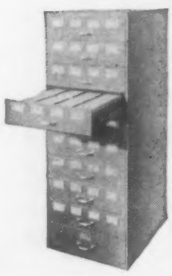

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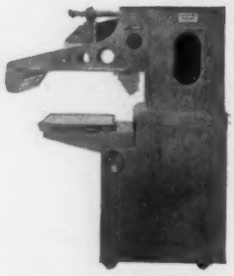

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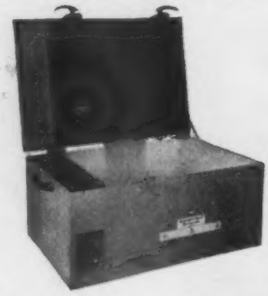

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FOR "G" CONTROL

* "G", the unit of change in velocity which is equal to the pull of gravity or 32.2 feet per second per second.

TIME TESTED TWIN CUSHIONS

"G"s, accelerations and decelerations, are part and parcel of the business of railroading, but, uncontrolled, they cause untold damage and cost fantastic sums year after year. • High "G"s and violent changes in "G"s create shock, and it is shock primarily that damages cars and lading and is a contributing cause of hot boxes. • Waughmat Twin Cushions reduce the "G"s of impact, but far more important, Twin Cushions so dampen changes in acceleration and deceleration as to reduce shock to a minimum. Eliminating all metal-to-metal contact, Twin Cushions "take the bite out of impact". Reducing longitudinal shock, they also *halve* component vertical shock thus providing added protection against one of the chief causes of lading damage. • For maximum car and lading protection . . .

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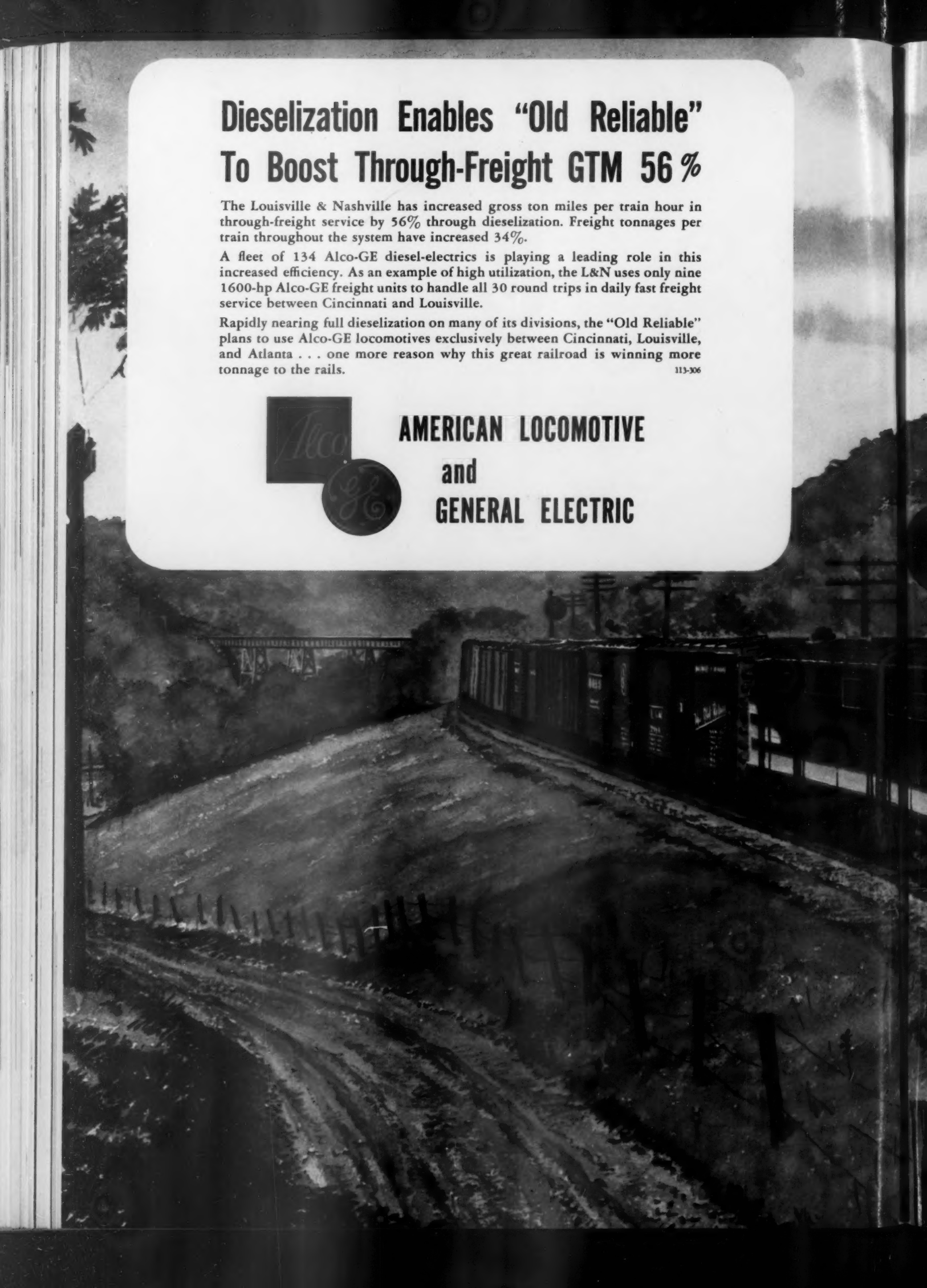

Dieselization Enables "Old Reliable" To Boost Through-Freight GTM 56%

The Louisville & Nashville has increased gross ton miles per train hour in through-freight service by 56% through dieselization. Freight tonnages per train throughout the system have increased 34%.

A fleet of 134 Alco-GE diesel-electrics is playing a leading role in this increased efficiency. As an example of high utilization, the L&N uses only nine 1600-hp Alco-GE freight units to handle all 30 round trips in daily fast freight service between Cincinnati and Louisville.

Rapidly nearing full dieselization on many of its divisions, the "Old Reliable" plans to use Alco-GE locomotives exclusively between Cincinnati, Louisville, and Atlanta . . . one more reason why this great railroad is winning more tonnage to the rails.

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Our exclusive electronic process produces an exceptionally light-weight insulation with proved thermal and acoustical values

MICROLITE
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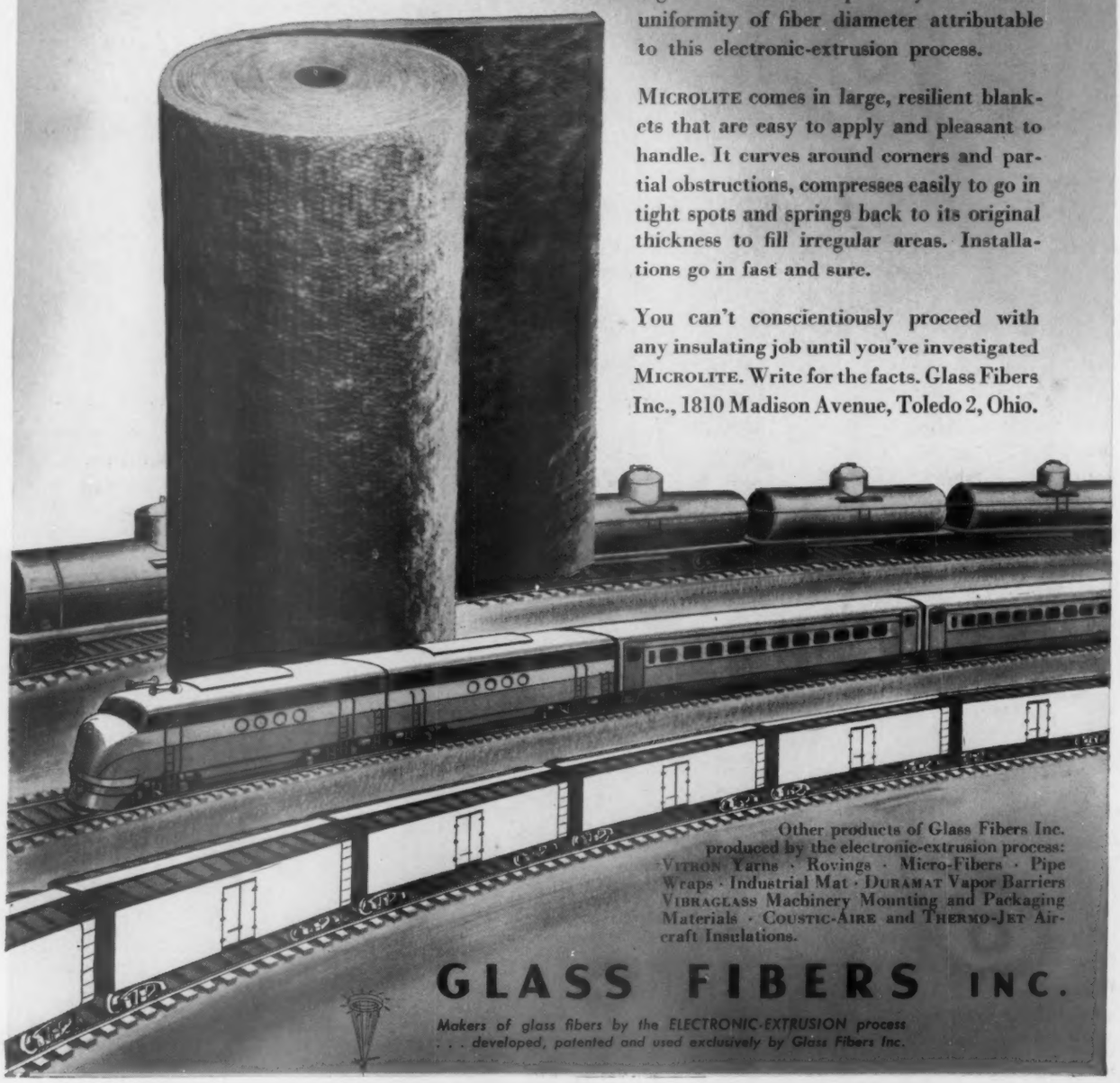
INSULATING WOOL

An independent process, developed and used exclusively by Glass Fibers Inc., produces long-fibered MICROLITE insulation in one-half pound per cubic foot density with outstanding thermal and acoustical insulation values. MICROLITE glass fiber insulating wool owes its superiority to extreme uniformity of fiber diameter attributable to this electronic-extrusion process.

MICROLITE comes in large, resilient blankets that are easy to apply and pleasant to handle. It curves around corners and partial obstructions, compresses easily to go in tight spots and springs back to its original thickness to fill irregular areas. Installations go in fast and sure.

You can't conscientiously proceed with any insulating job until you've investigated MICROLITE. Write for the facts. Glass Fibers Inc., 1810 Madison Avenue, Toledo 2, Ohio.



Other products of Glass Fibers Inc. produced by the electronic-extrusion process: VITRON Yarns · Rovings · Micro-Fibers · Pipe Wraps · Industrial Mat · DURAMAT Vapor Barriers VIBRAGLASS Machinery Mounting and Packaging Materials · COUSTIC-AIRE and THERMO-JET Aircraft Insulations.

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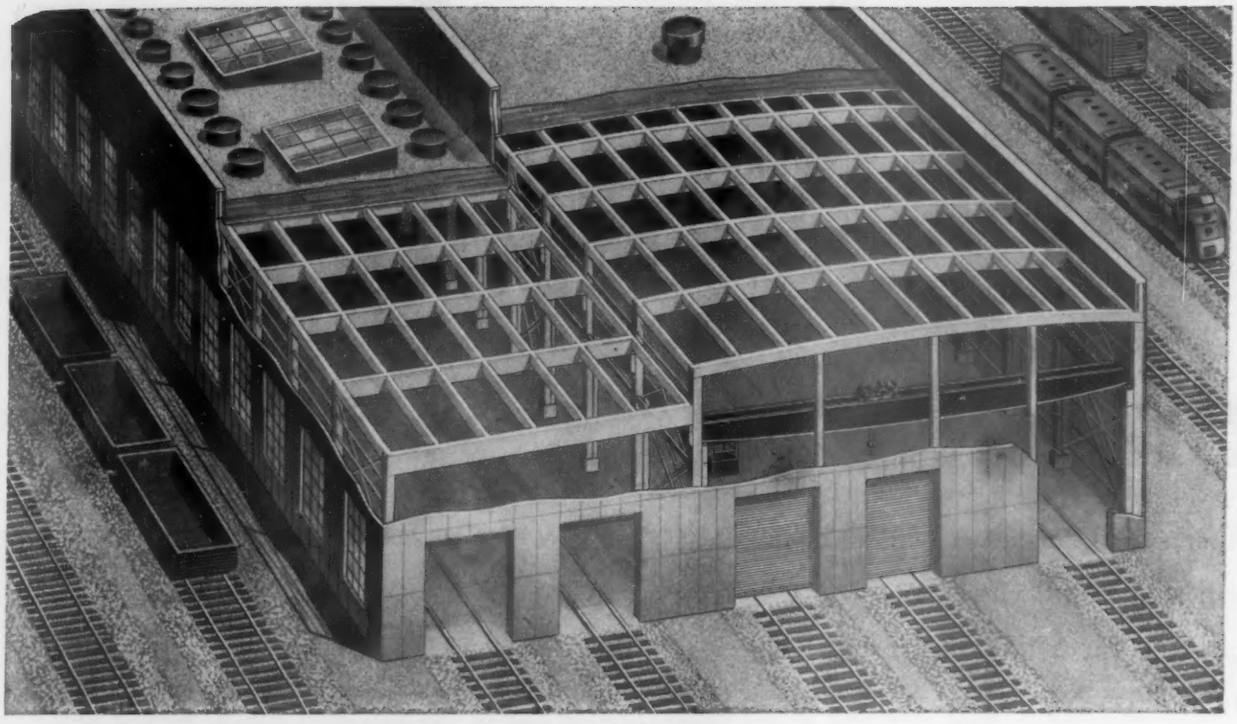

Build with Timber Trusses and Beams

. . . and get permanent, fire-resistant diesel-repair shops at genuinely low cost

YOUR DIESELS are housed in safety when your repair shops are built with timber trusses and beams by Timber Structures, Inc. Carefully engineered, and precision fabricated, these units provide permanent lightweight, fire-safe construction that will last for generations.

"Stay Put" Without Maintenance

These structural members are formed by glued lamination which joins thoroughly seasoned lumber under pressure by glues as permanent and strong as the wood. Pound for pound these glulam timbers are stronger than any commonly used material. They are dimensionally stable, free from seasoning action, and require little or no maintenance.

Open floor areas are possible in almost any span and as long as the jobsite permits. Any kind of roof decking may be used, including pre-moulded or cast-in-place panels.

Resistant to Destruction by Fire

Wood is one of the best of natural insulating materials, confining heat penetration to only one inch in 33 minutes of severe fire exposure. Heavy glulam timber units therefore retain structural strength and remain fully serviceable through fires which would destroy other material.

Since additional insulation is not needed, it isn't necessary to carry the tremendous dead loads required to get equal fire resistance with other material. When used with concrete or masonry side walls, heavy timber members receive the favorable insurance rates which their excellent fire resistance record has earned. Fire recardant treatments are available if further protection is desired.

Ask Us for Literature

Detailed information on glulam construction is contained in the booklet "Engineered Timber Construction". A copy is yours for the asking. See your nearest Timber Structures office, or use the coupon below.

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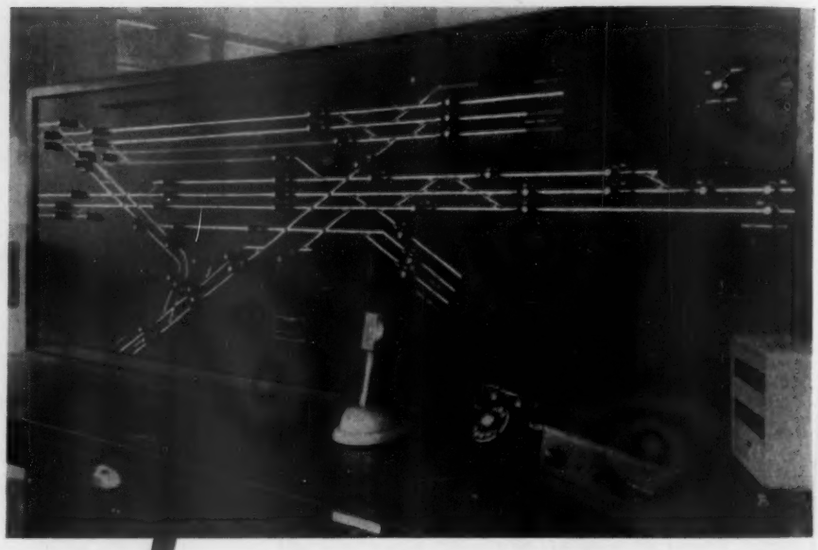
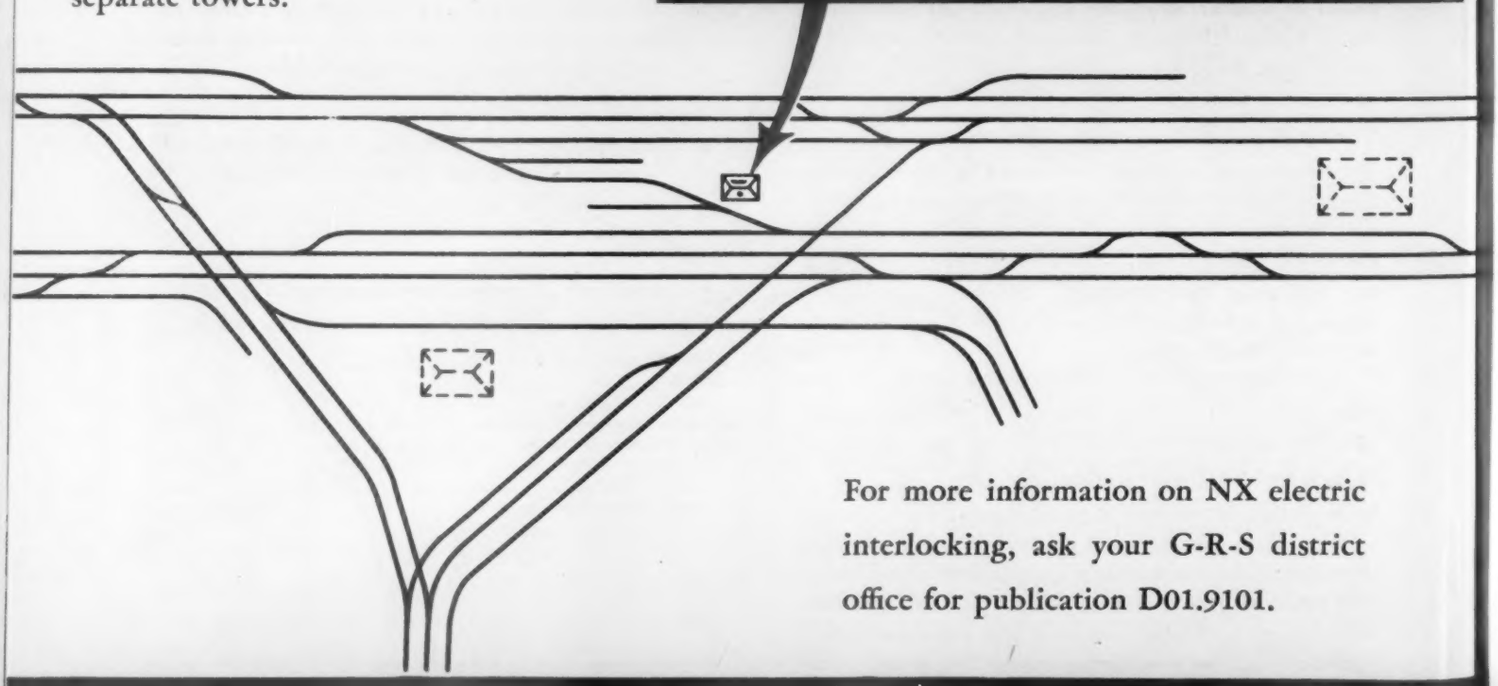
consolidates 2 towers

A southern road, faced with handling heavy, dense traffic with 450 to 500 different line-ups a day, has installed NX (eNtrance-eXit) interlocking to avoid delays.

Besides expediting traffic, NX made it possible to consolidate control of the entire area in one control machine. Formerly, traffic was controlled by two separate towers.





For more information on NX electric interlocking, ask your G-R-S district office for publication D01.9101.

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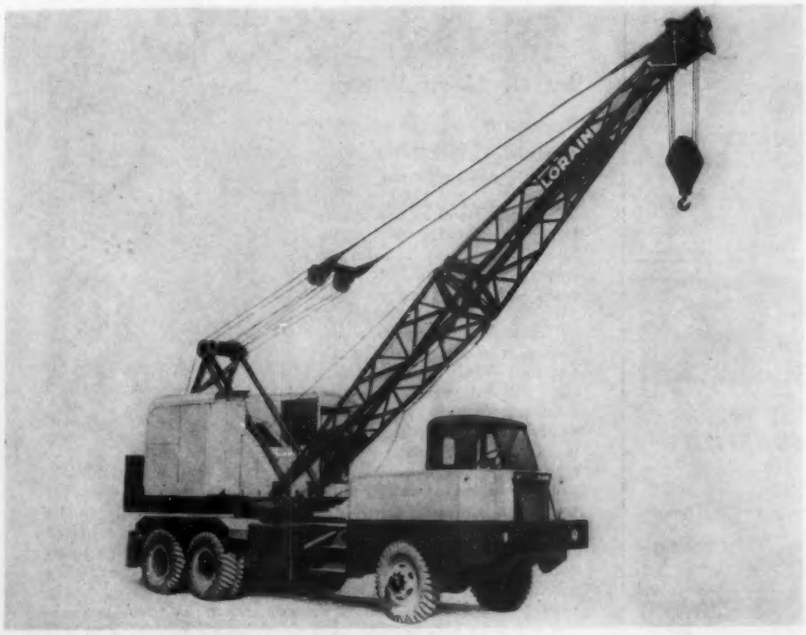


The 30-ton Lorain Model MC-524 Moto-Crane.

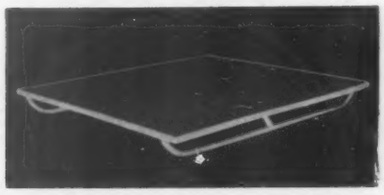
New 30-Ton Crane

Additional crane capacity selection has been added to the Lorain line of cranes on rubber, manufactured by the Thew Shovel Company, Lorain, Ohio. A 30-ton unit is now available in both the Moto-Crane and self-propelled models. The model designations of the new unit are Moto-Crane Model MC-524, and self-propelled Model SP-524.

The Moto-Crane version of the new model consists of a turntable mounted on an automotive-type 3-axle carrier having 10 speeds forward and 2 in reverse. It can travel on the highways at speeds up to 30 m.p.h. and has double rear axle bogies. The developed tractive effort is said to be sufficient to enable it to travel over soft ground and rough terrain. Both gasoline and diesel power plants are available. The carrier is available with two rear driving axles only or with the addition of a front driving axle. Air brakes, air assist steering and accessories for highway operation, plus many extras, are standard equipment. The MC-524 is convertible to shovel, crane, clamshell, dragline or hoe, and is rated in the 1-cu. yd. class as a shovel.

The self-propelled model, built for more limited travel needs, consists of the same basic 30-ton turntable mounted on a three-axle carrier propelled by the turntable engine, either gasoline or diesel. Drive is on the two rear axles only. There are four speeds in both directions, with a top travel speed of 7½ m.p.h. Air brakes and full air steering are operated from the turntable cab. The SP-524 is available as a crane and dragline only.

The Moto-Crane is 120 in. in overall width, and the self-propelled model is 123 in. wide. These widths are claimed to give greater lifting capacity without the use of outriggers. Both machines are equipped with crane booms 100-ft. in length to which can be added a 25-ft. tip extension. The boom is approximately 1/3 wider and 1/3 deeper than previous booms supplied on machines of this type, and the all-welded sections are pin-connected. A floating harness is provided for 8-part reeving of boom hoist cable. The boom head is equipped with three main boom head sheaves, plus auxiliary deflector sheaves which permit reeving up to six parts of hoist line without the use of a top block. A telescopic-type gantry is available on both models for long boom operation.



Tubular Steel All-Purpose Pallet

A new all-purpose welded steel pallet has been introduced by the Econoweld Company, Dayton, Ohio. The pallet is said to be lighter than wood pallets of the same design, but is priced in the same $6 to $10 bracket, depending upon size, bracing, and number of skid runners.

This newcomer in the pallet field is described by the manufacturer as an eight-entry pallet which features radical departures from conventional design, on which patents have been applied for. Two or more stout tubular skid runners are welded and braced to

a rectangular angle-iron frame which encases and protects a laminated wood deck.

The maker has announced that production of the new pallet will not be confined to "standard" sizes or types, but it will be built to customer's specifications without added cost.

Ice and Snow Melting Chemical

Addition of an anti-rust phosphate to its pellet compound called Melt, an ice and snow melting chemical, has been announced by the Chem Industrial Company, Cleveland 9. This formula, developed to safeguard against excessive rust in the deicing of pipes, railway switches, gutters, drains, etc., also protects cars, trucks and machinery on loading docks and in driveways.

The pellets have also been resized for maximum thawing action. They are applied by sprinkling sparingly over ice and snow-covered surfaces. If used at the start of a storm, the product will melt snow as fast as it falls until its thawing action is dissipated. It is packed in 25-lb. pails and 100-lb. drums and bags.

HYMAN-MICHAELS COMPANY

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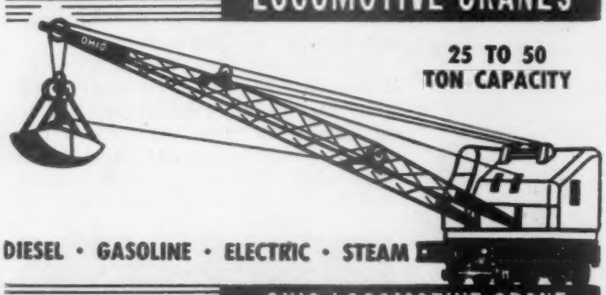
OHIO
LOCOMOTIVE CRANES



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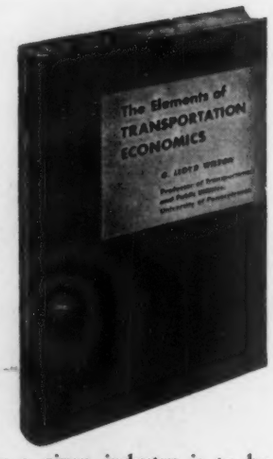
The Elements of
TRANSPORTATION ECONOMICS

by G. Lloyd Wilson

Professor of Transportation, University of Pennsylvania



To get ahead in the transportation field, you must have a grasp of the larger issues of the subject. You can't get by, for instance, without an understanding of how transportation, industry and commerce mesh together—and how this set-up will develop in the future. This is basic and your key to understanding it is familiarity with basic transportation economics!

Do you know how Transportation determines whether a given industry is to be conducted as a large, medium or small-scale enterprise? What "place utility" is? How "cross-hauling" can be justified? Can you name six well-defined channels of marketing manufactured goods? Or fifteen principal classes of transportation instrumentalities? These and many more answers are yours in Dr. Wilson's keenly-written analysis. You will find exactly what you need in Dr. Wilson's book.

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Benchmarks and Yardsticks

AGAIN ON THE SUBJECT of the observation of Rule G, a capable assistant superintendent at a major urban point on a big railroad writes:

"Rule G to me is one of the most important in the book, and where it is disregarded and where supervision allows it to be disregarded, a poor safety record, culminating perhaps in a major accident, will surely result. It is incontestable that alcohol affects judgment, and operating personnel must keep continually on the alert, passing continual judgment on such things as speed of cars being switched, clearances, and so on.

"It has been my experience that most employees do not want to work with a fellow-employee who is not in proper condition, as he may endanger their safety as well as his own. However, a lackadaisical attitude among some supervisors has made such employees feel that it is useless to report a man who may have violated Rule G.

"Where a supervisor indicates, however, that he expects to enforce Rule G to the hilt, employees will cooperate with him. While in a formal investigation, they may say that they called the trainmaster because 'the man was sick,' nonetheless they are bringing to the attention of the proper officer of the company a Rule G violation, and it is up to the trainmaster to make a proper investigation stick. One or two cases of drastic disciplinary action will have a salutary effect in discouraging future violations of the rule."

A correspondent in Knoxville, Tenn., believes that more systematic personnel policies on the part of the railroads would help to correct this situation.

"Years ago," he writes, "railroads discharged men for drinking because they were sure of competent replacements. Practically everywhere, a trainmaster could hire a 'boomer' at an instant's notice, but today, there are no boomers. When a railroad discharges a man nowadays, it must go through a lengthy hiring process and training period before a replacement is ready for work. Therefore, it is usually not expedient to fire a man just for being a bad boy now and then.

"It seems to me that the foremost weapon against Rule G violation is a modernized personnel program. Railroads desiring to keep competent men on their rosters must work out a system whereby personnel are guaranteed year-round employment. If arrangements could be made to transfer operating men into non-operating jobs during slack seasons, the railroads would be guaranteed the finest sort of employees. This, of course, will be difficult to do, for the brotherhoods will naturally object."

J. G. L.

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NEED FOR HEAVY AND FRESH THINKING ON THE FREIGHT RATE PROBLEM

Traffic Vice-President Fred Carpi of the Pennsylvania made a remarkable speech not long ago to a group of petroleum people—which was reported rather briefly in our news pages at the time. Among several significant observations he made were the following:

"Despite the recent overhaul by the Interstate Commerce Commission of the class rate structure east of the Rocky mountains, the fabric now in effect is not suited to the needs of the bulk of the commerce. Railroad rates are still influenced to a considerable degree by value of service. I could find no serious quarrel with that conception if it was employed universally, but unfortunately this is not the case. If it is not to be given general application, we simply cannot continue to hold an umbrella over our competitors.

"The rate structure has undergone some profound changes during the past two decades, so much so that some people describe it as chaotic. Whatever the trend may be called, it is actually motivated by a desire of the railroads to face the realities. We have been going through an evolutionary process, whereas we should have undergone a revolutionary one. The latter is more violent or painful but recovery is usually quicker.

"In a relative sense the cost of producing railroad transportation should come down. One of the best approaches is to reduce the cost of moving the recognized unit—the carload. If the ratio of the load to the tare can be improved, there is hope of achieving the desired result. What we should strive for is bigger loads. If the load per car can be increased, the revenue per train-mile can likewise be increased. . . .

"Considerable criticism has been leveled at the traffic officers of railroads for our failure to adjust rates promptly to meet competition. For much of the time since 1946 we have been before regulatory bodies seeking increases in rates that were long overdue. Some people have compounded the confusion by making it appear that we are inconsistent in seeking general increases while at the same time proposing specific reductions. The fact that ordinary business sense dictates that one should meet competition, regardless of general levels, has been conveniently ignored, as was the fact that the sum total of such reductions would be insignificant if the rate structure were viewed as a whole.

"The general increases which have been sought and obtained by the railroads were sorely needed, and while they were being debated we refrained from saying anything that would cloud the issue. In the last case the trucking industry had the effrontery to seek to attach a condition to the granting of the general increase that would have frozen the rate structure. If it had been successful in its efforts, it would have been well on the way to establishing a monopoly for itself. . . .

To Meet Competition Where It Is

"The railroad industry is determined to meet competition wherever it exists and wherever it can be done on a profitable basis. Traffic officers of the railroads have a keen sense of responsibility, however, and strive to avoid any possibility of making a bad situation worse. We are confronted not only with common carrier competition on the highway, which is showing increasing signs of stability, but also with the competition of contract and private carriers. The latter two groups are not concerned with maintaining relationships, market or otherwise, and are seemingly unconcerned with the discriminatory provisions of the Interstate Commerce Act.

"May I also state that it is a startling phenomenon that a reduction in rail rates, even though based on bona fide competition, runs the risk of being called discriminatory and as adversely affecting pricing practices, whereas reduced truck rates, not even based on meeting competition but with the plain objective of taking specific shipments which otherwise would go to competitors, hardly raise an eyebrow."

During the recent holidays, the so-called "Lexington group" of historians interested in railroads had a meeting in Washington and, in a timely program, discussed the teachings of two of the Nineteenth Century's original thinkers on the question of freight rates—Albert Fink and Arthur Twining Hadley. Albert Fink, it will be remembered, was an advocate of pooling of traffic—first

in the Southeast and later as chairman of the Trunk Line Association, which he served for 12 years. Mr. Fink's ideas about the proper approach to railroad rate-making were not destined to prevail—they were crushed beneath the irresistible advance of the glacier of government regulation. Nevertheless, the recent Lexington group speaker, Robert J. Agnew of the University of Pittsburgh, could say of him: "His approach to the economics of his industry and to the theory of rate-making have left the moderns little to do beyond occasional refinement. The content of a modern college course in the economics of transportation contains little that Fink did not understand in the 1870's."

President Hadley, of course, will be recalled as the distinguished head of Yale University, who began his career as a railroad economist (including an editorship on Railroad Gazette, a predecessor of this paper); and who as long as he lived never lost his interest in, and wisdom regarding, railroad transportation. Transportation conditions have changed vastly in the seventy years since the heyday of Fink and Hadley. They have, in fact, changed so much that the situation now confronting rate men presents just as many novel aspects, calling for original thinking, as any which challenged those great minds back in the 1870's.

The railroads today, in short, need 1953 models of Fink and Hadley—embodying, if possible, all available modern improvements. The railroads were growing so fast back in the last quarter of the 1800's that many mistakes could be made without fatal results—which isn't true any longer. So today's Fink and Hadley, if they can be found, need—not only brains to equal those of their 1870 predecessors—but even greater equipment in eloquence and persuasiveness. This need arises from the vested interest a lot of businesses now have, or believe they have, in market advantages that depend on keeping railroad rates in a regulatory straight-jacket—vested interests which had scarcely been born when Fink and Hadley were flourishing.

Dollars for Ideas—Why Not?

An automobile manufacturer is offering a couple of hundred thousand dollars in prizes for suggestions from the citizenry for curing the country's "highway muddle." It ought to be worth at least as much to the railroads to get some fresh and effective ideas for freeing the railroads from the "regulation muddle"—so they could make rates to attract to themselves all the traffic as to which they have an "inherent advantage." They're not getting a lot of that traffic now. If they were, there wouldn't be any more "railroad problem" than there is an "automobile problem" or a "steel problem" or a "petroleum industry problem."

COERCION OF EMPLOYEES UNDER THE "UNION SHOP"

This paper has a letter from an employee of an important western railroad who identifies himself as a member of one of the standard locomotive brotherhoods and also of an organization known as the United Railroad Operating Crafts, which holds itself out to serve all the operating occupations.

Our correspondent advises that the standard operating organizations, on roads where the "union shop" has been accepted, take the position that employees belonging only to the new organization should be dismissed from service for not holding union membership. He advises further, however, that this point of view is being contested in the courts, with the final outcome as yet undecided. But, he adds, the standard organizations have another barrel to their gun. This is one of the Adjustment Board awards which appears to hold that "seniority is the property of the organization holding the contract for that type of work on the property."

Under the application of this theory, a man who may have been a member of a standard organization and have 30 years' seniority on his job, would, if discharged and acceptable to management for reinstatement, be denied reinstatement if he had dropped his membership in the standard organization.

Our correspondent says that, in view of the power of the standard organization over his job, he has joined it and is paying dues to it, but he does not believe he should be forced to belong to an organization of which he does not approve, merely to hold his job. He considers this requirement "un-American."

We agree with him. We also agree when he says that a labor union ought to have to get and retain its members by holding itself out to serve them, and should not be given the power to collect dues from people who do not approve of its policies. The railway unions didn't need the "union shop" to get members; and why a fighter wants to put on brass knuckles when he's doing all right without them, is a little hard to understand. There was no justification for changing the law to give the unions this coercive weapon. However, it wasn't the radicals and New Dealers alone who saddled this incubus on the railroads and their employees—the G.O.P. jumped on the band wagon, too.

The only advice we can give our correspondent is that he complain to his congressman and senator and to the new President, and persuade his fellow-employees to do the same, if they don't like the present law. The railroads certainly don't like it and it wasn't enacted to please them.

How the Southern Pacific Uses Train-Wayside Radio

. . . in the High Sierra

The dispatcher's radio control console is on a bracket at his left.

Newly developed interconnected system permits . . .

- ***Two-way communication between trains***
- ***Wayside stations and trains or snow plows***
- ***Dispatcher and stations or trains***
- ***Station-to-station to bridge broken line wires***

On the 155-mile division from Sacramento, Cal., east over the high Sierra Nevada mountains to Sparks, Nev., the Southern Pacific has installed a new form of communication which is a complete and flexible interconnection of the dispatcher's telephone line wire circuit with radio stations at four intermediate offices and on the trains, as well as rotaries, plows, flangers and other snow fighting equipment. If line wires break, the radio can be used from station to station to maintain communication.

This division is part of the "Overland route" between San Francisco and Chicago via Ogden and Omaha. This Sacramento-Sparks territory, which is double track, handles an average of 10 scheduled passenger trains daily, and during some months, freight trains average 25 a day.

The dispatcher's office is located at Sacramento, 92 miles east of San Francisco, and at an elevation of 35 ft. above sea level. In the 53 miles from Sacramento to Colfax—the site of the first wayside radio station—the elevation increases to 2,418 ft. In the next 29 miles, the railroad climbs to 5,218 ft. elevation at Emigrant Gap, where the second radio station is located. Then 22 miles, up to 6,880 ft. at Norden, the third radio station. From Norden, at the crest in Donner pass, the railroad goes down grade eastbound 15 miles to 5,819 ft. elevation at Truckee, the fourth radio station. Heavy snow, sometimes from 10 to 20 ft. in depth, is encountered during winter months in the Donner pass area, and from there west to Emigrant gap. Snowsheds protect the main tracks where snow slides are most likely to occur.

A conventional two-wire telephone line circuit, on the pole line, extends from the Sacramento dispatcher's office through the four offices, where radio wayside stations are located, and on to the office at Sparks, which is the east end of the division. On his desk the dispatcher has a small control console which has an enclosed loudspeaker and small toggle-type key levers, with associated indication lamps. When the key at the right in the lower row is in the normal position, incoming voice calls from any of the five wayside offices are reproduced in the dispatcher's loudspeaker, and he can answer by stepping on a foot treadle when he speaks into his microphone.

Operators are on duty 24 hours daily at Sparks, and also at the four offices where radio stations are in service. At each radio station the operator has, on his desk, a small communications console. The loudspeaker in the console is normally connected to reproduce voice calls that come in, not only on the dispatcher's line wire circuit but also by radio from trains within range of

Assistant superintendent at Norden uses radio to call rotaries, flangers and other snow clearing equipment.

At Norden the radio antenna is located at the top of a 75-ft. steel tower.

the station. The operator can adjust the volume of calls from different sources.

If the operator at Norden, for example, wants to talk to the dispatcher he pushes his "intercom" button (which prevents his voice from going out on the radio), and then he pushes his press-to-talk button on his microphone when he speaks into it to call the dispatcher. Such a call is reproduced by the loudspeaker in the dispatcher's console. If the dispatcher has his key in the "intercom" position he can answer directly by speaking into his microphone. A special compression amplifier gives all incoming calls the necessary gain to operate the dispatcher's loudspeaker at a uniform level, regardless of variations in the strength of incoming signals. Duplex, i.e., "break in" is thus provided so that an incoming emergency call can be heard by the dispatcher even if he is using the line for another conversation.

This "intercom" method of instantly initiating conversation by voice calling, in either direction, with no delay for operation of conventional selectors and bells, is such an important convenience and time saver that the previous telephone train dispatching circuit, with conventional selectors and calling by ringing, is being left idle.

With the new system, if the dispatcher receives no answer to a voice call for an operator at some station, he can send out a special "on-off" control that will ring a bell in the station, and then return an "answer back" to give the dispatcher verification of his call.

Normally at each wayside station the radio is in operation to receive calls at all times, and the operator can immediately answer. If the operator at Norden, for example, receives a radio call from a train, he presses the "local" button on the console and pushes the press-to-talk button on the base of his microphone as he speaks into it to answer. When the conversation is completed, the radio system reverts to the normal receiving condition, automatically.

If a radio call comes in to Norden, for example, under emergency circumstances such that the person on the train must speak directly with the dispatcher, the procedure is as follows. The operator at Norden calls the dispatcher on the line wire circuit, and tells him, for example, that someone on No. 102, en route to Truckee, wants to talk to him. The operator pushes the "dispatcher" button on his console. The dispatcher throws his key from "intercom" to "radio" and, in the top row on his console, he throws the "Norden" key up. This lights an indication lamp above this key, and starts the operation of devices which produce a combination code of voice frequency tones. When the dispatcher steps on the treadle of his press-to-talk foot switch, the voice frequency code is superimposed on the line circuit and goes to Norden to "key" the radio to transmit. Then the words spoken by the dispatcher into his microphone go over the wires to Norden and out over the radio to the train. When he removes his foot from the treadle, the voice frequency code is taken off the line, and the radio at Norden automatically reverts to "receive" to accept the answer from the train to Norden, and relay it on over the wires to the dispatcher.

During such a conversation, the operator at Norden hears, on his loudspeaker, all that is said by both parties. Thus he not only is informed of circumstances being

discussed but also he has a constant check on the satisfactory operation of the radio. If the radio at any one station does fail, the dispatcher can change over to use the radio at the next station either way, or he can set up connections to broadcast over all the other radio stations simultaneously.

If an operator is to leave his desk for even a few minutes, the connections just described could be established so that any unexpected radio calls from a train, in range of that station, would be heard directly by the dispatcher and he could answer. When a conversation between a train and the dispatcher is finished, the dispatcher pulls down on his Norden key which stops the operation of the devices producing the special voice frequency code for Norden. The dispatcher pulls his lower left key from "radio" to "intercom"; and the operator at Norden pushes his button which changes his radio from "dispatcher" to "local," thereby returning the system to normal.

If a snow slide should break the telephone line wires between Emigrant Gap and Norden, for example, the radio at these two offices can be used to bridge the gap. In such an instance, the operators at Emigrant Gap and Norden throw switches which cause the radio to operate on frequency No. 2, which is for station-to-station communication. A second special switch is thrown which puts the radio at Norden "on the line," east toward Truckee, for receiving all the time. This is the same situation as results when the dispatcher moves his Norden lever "up" (under normal line wire conditions) and the Norden operator's "dispatcher" button is pushed.

As part of the "bridge" operation, the operators at Truckee and at Sparks then throw their emergency switches which cause a special tone to be superimposed on the line when they operate their push-to-talk buttons. This "keys" the radio at Norden to transmit by radio voice messages from these operators carried on the line wires to Norden. With these connections established, radio "bridges" the gap where the line wires are down.

This communication project includes radio on all road train locomotives and cabooses. This radio equipment is now in service on the locomotives used on passenger trains, and installation is being made as rapidly as practicable on the freight locomotives and cabooses.

The area of deepest snow extends for 35 miles between Emigrant Gap and Truckee. Snow fighting equipment assigned to this territory includes six rotaries, three spreaders and five flangers. These units are each equipped with two-way radio tuned to a special frequency to operate only with extra radio transmitter-receiver stations at Norden and Emigrant Gap. During and after a snow storm, when snow is being cleared, an extra operator is assigned to the second radio station at Norden to handle communications back and forth with the snow fighting equipment.

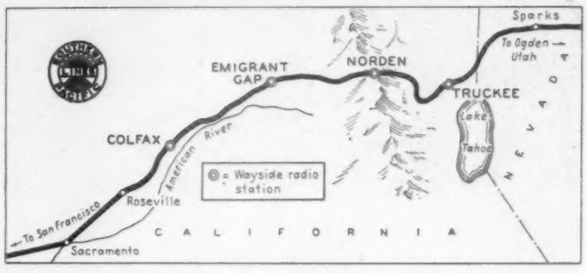
At each wayside station the radio transmitting and receiving installation is in duplicate so that stand-by equipment can be cut in quickly if a set fails. In each office there is a panel with a set of toggle switches and a meter to register the RF output of the "in service" and the "standby" transmitter. When the operator sees by the meter needle that the set in service is failing, he throws switches to change over to the standby set.

The radio equipment operates on 12 volts d.c., and each station includes a lead type storage battery with capacity for at least 30 hours operation. This battery is on floating charge from a rectifier fed by a 15-volt alternator which is driven by a 120-volt a.c. motor fed from commercial supply. This combination gives proper voltage regulation for the radio. The radio controls are operated by 117-volt a.c. from commercial sources. If this incoming power fails, this a.c. load is taken over by a vibrator-converter which is operated from a second set of batteries. If the incoming commercial a.c. power fails, a gasoline engine-driven alternator starts automatically to take the load.

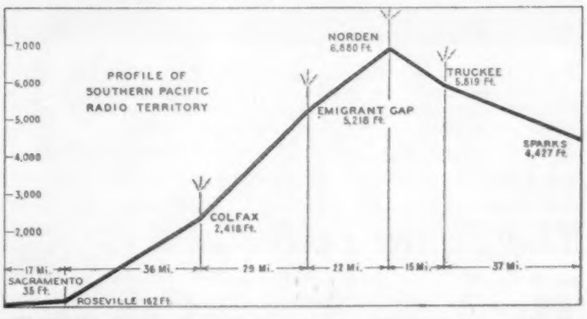
At the four wayside radio stations the antennas are on 75-ft. structural steel towers. Bi-directional beam antennas are used at Norden and Emigrant Gap, and half-wave coaxial antennas are used at Colfax and Truckee. The connections from the antennas down to the radio equipment are RG-17/U coaxial flexible cable.

This radio project was planned and installed by Southern Pacific forces under the direction of A. E. DeMattei, superintendent of communications.

Conductor on snow flanger uses radio to talk to snow clearing headquarters at Norden.



The Southern Pacific's Sierra Nevada line.



The line crossing the Sierra rises in 87 miles from 162 ft. elevation to 6,880 ft.

Rigid-frame construction eliminates the need for intermediate columns or posts which would interfere with freighthouse operations. The Towveyor system reduces effort of freight-handling personnel and moves freight quickly from one part of the house to another, while other mechanical equipment can handle heavy shipments.

The Santa Fe Builds . . .

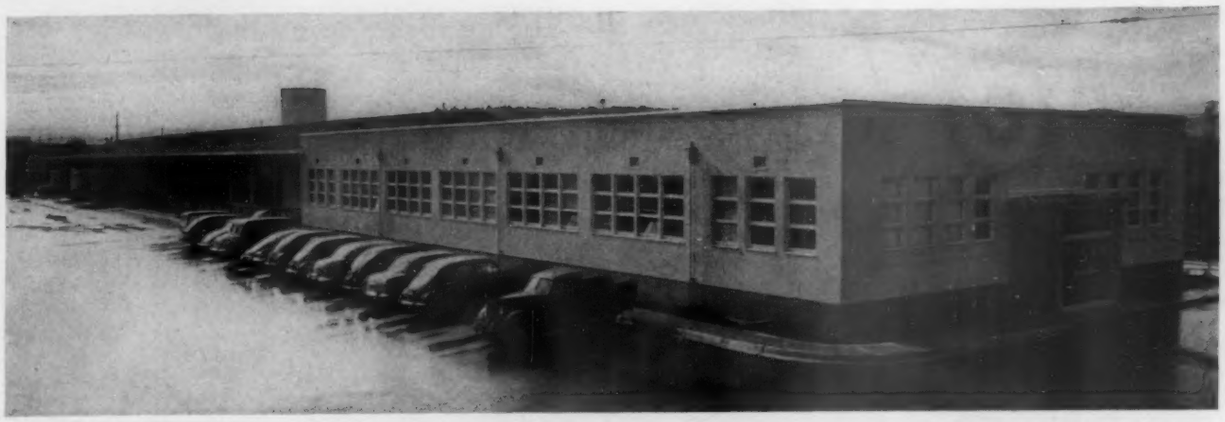
Modern Freighthouse for San Francisco

Towveyor and communication systems incorporated to assure Bay Area of prompt and efficient handling of l.c.l. shipments

Cooperating in the city's waterfront modernization plan and spurred on by expanding l.c.l. business, plus the need for greater efficiency and economy in handling such business, the Santa Fe has constructed a new freight-handling facility at Fourth and Illinois streets near the China Basin waterfront in San Francisco. The new freighthouse employs a modern communication and centralized checking system to promote close supervision and control of operations, and is equipped with an overhead two-way paper conveyor for the transmittal of waybills between the dock office and the main office. Also it has a special Towveyor system, similar to the one installed by the road at its Corwith freight station* in Chicago, for moving freight carefully and expeditiously within the station.

The new station is the third one to be used by the Santa Fe in San Francisco since 1900. The first was at Spear and Harrison streets. A portion is still standing, but it is being used only for storage and forwarding

*Described in the December 1, 1952, *Railway Age*.



The office headhouse of Sante Fe's new freight station at San Francisco is utilitarian and at the same time attractive. When the early plantings of the shrubs around the office are more mature, they will add to the appearance. The wide paved driveway on the tailboard side of the freighthouse provides room for vehicle maneuverability.

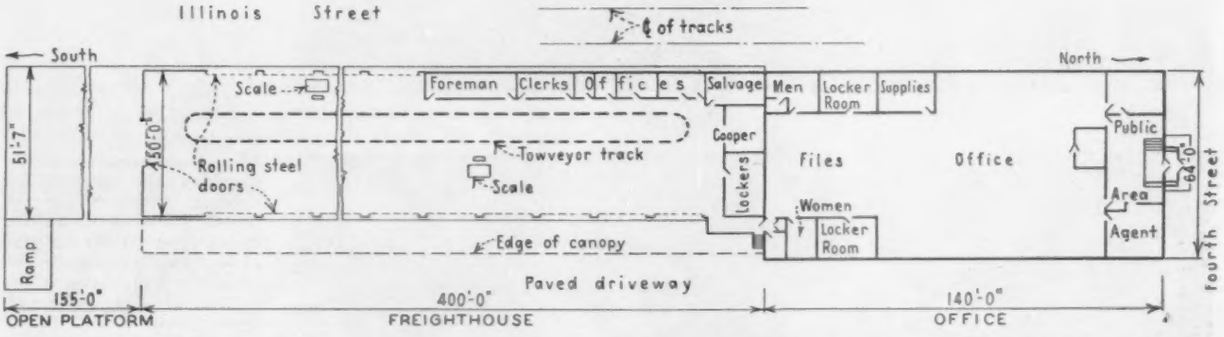


Diagram showing the general layout of Santa Fe's new freight station located at Fourth and Illinois streets in San Francisco.

purposes. The second was on Third street. This facility, however, was on leased ground and was in the way of a projected waterfront highway that is part of the city's harbor-improvement program. Also, since it was outmoded in design and construction the railroad decided that a new freight station with modern equipment was needed to improve operating efficiency.

In designing the new freighthouse consideration was given to the fact that the road's truck-line subsidiary, the Santa Fe Trail Transportation Company, was to use the facility and that the business of the highway subsidiary had increased rapidly during the past few years. For these reasons the freight station was designed with a much longer frontage on the tailboard side than on the track side. This is why the dock office and other related offices were arranged to occupy part of the track side of the freighthouse platform.

Has Three Major Parts

The facility was built with three major elements: An office headhouse, a freighthouse, and an open platform. It has an overall length of 695 ft. and has 36,170 sq. ft. of floor area. Since the site chosen for the new structure is on filled ground it was necessary to drive foundation piling 158 ft. long to obtain adequate bearing power.

The office portion of the structure is of wood-frame construction, stucco covered, and has steel pipe columns supporting the roof. This section of the building has offices for the freight agent and for the agent of the Santa Fe Trail Transportation Company. Ample space has been allotted for lunch rooms and rest rooms for the personnel. The entrance is brick framed and has tempered glass doors. The ceilings are of acoustical tile, and the floors in the office areas are covered with asphalt tile.

The freighthouse section has 20,000 sq. ft. of floor area. This section is comprised of a Butler prefabricated building in which the roof is supported by steel columns and beams of rigid-frame construction. The roof is fashioned from 24-gage steel sheets having special corrugations. The bolts used in holding the wall and roof sheets together for rigidity and weather-tightness are cadmium-plated or galvanized.

The floor of the freighthouse is of double-decked timber. Access from three sides is provided by 31 rolling-type steel doors, each 17 ft. wide by 10 ft. 6 in. high. These doors, manufactured in San Francisco, are slatted to permit them to be rolled up and are prowler-proof, fire-resistant and weathertight. A patented translucent sheet of green, corrugated plastic, reinforced with glass fibers, has been placed above each of the doors on the west, or track, side to admit light but to minimize heat and glare.

The open platform of the facility also has a double-deck timber floor designed to sustain heavy fork-lift trucks and other types of platform equipment. At the

In the general foreman's office. Foreman's desk (foreground) is equipped with console for communication with any part of the house. Central switchboard is at rear.

The communication center provides the means for linking checkers in adjacent office with callers in cars or trucks spotted at any point alongside the freighthouse. It also is the center of the public-address system.

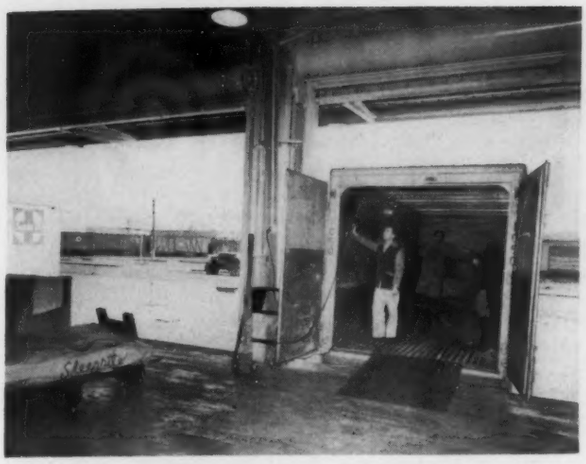
end a ramp 16 ft. wide has been provided between the ground level and the platform.

Two stub-ended tracks serve the west side of the structure and a paved driveway, 13,120 sq. ft. in area, of asphaltic concrete, runs for the full length of the facility on its east side.

Towveyor Moves Freight

The Towveyor system consists essentially of an underfloor continuous chain on which towing dogs are attached at 15-ft. intervals for engaging towing pins of four-wheeled platform trucks. The pins of these trucks can be raised and lowered by means of a foot pedal. The Towveyor circuit is approximately 730 ft. long and can be operated at speeds ranging from 100 to 160 ft. per min.

Freight taken from a freight car is placed on a four-wheel truck which is wheeled to the Towveyor track. There the pin is lowered and allowed to drop into a slot in the platform over the Towveyor system. A towing dog of the chain engages the pin and tows the truck



Callers are assigned portable speakers. They plug them into any one of the convenient plug-in points and carry the units with them into the car or truck. They are also given extension-cord lights.

Waybills and other papers are transmitted on a belt conveyor between offices in the headhouse and on the dock. It is not necessary to fold or twist them for forwarding by this system.

until it reaches a point opposite the vehicle in which the freight is to be loaded. A freight handler at this point raises the pin by again working the pedal, thus disengaging the truck from the underfloor chain, and wheels the truck to the desired spot for unloading. Empty trucks are put on, and removed from, the Towveyor system as desired.

The towing system is powered by an electric motor and has a take-up device for keeping the chain taut at all times.

The two-way paper conveyor is an innovation insofar as railroad freighthouses are concerned and saves steps between the freight room and office. This device, which consists of wide fabric belts, will carry waybills and other documents without folding or twisting.

Checkers Taken Off Floor

Also effective in speeding up the movement of freight is the use of communication systems, similar to those at Corwith, which remove the checkers from the freighthouse floor and place them in an office whence each man can keep pace with the checking of several callers. These systems include a two-way communication system between the dock office and various points on the freighthouse platform, and a public address system.

With these communication systems, the checker remains at an office desk where he can handle waybills and other papers conveniently. His desk has low partitions of acoustical tile surrounding on three sides a small speaking console equipped with a boom-type microphone.

Through a central switchboard, each checker is connected with the portable speakers of several callers who plug their speakers into the nearest receptacle and carry the units into the trucks or cars. As each caller loads freight on a platform truck, he signals the checker and calls out the freight he is handling. Plug-in outlets for extension light cords are also provided near the speaker plug-ins so that the callers have good illumination within the cars or trucks. The freighthouse foreman also has a desk console by means of which he can talk over any of the portable speakers or over the public-address system.

Although the new facility was built of fire-resistant materials and is located within a stone's throw of the San Francisco fire department's No. 19 engine company, other precautions were taken to insure safety from fire. A sprinkler system that operates automatically and meets the specifications of the Pacific Fire Rating Bureau was installed under the floor and beneath the roof of the freighthouse and in the office area. This system is connected by 120 ft. of 8-in. main to the city water main and utilizes 65 psi. of water pressure. A predetermined temperature will set off any one or all of the sprinkler heads and, when this occurs, a bell rings to warn personnel on the premises.

New metal furniture was installed for all office personnel. Fluorescent lighting was provided for more efficiency and greater eye comfort.

Three types of illumination—fluorescent, incandescent and mercury-vapor—are utilized to promote efficiency and eye comfort of personnel attached to the new freight-handling facility. The general office portion is lighted by fluorescent fixtures. The freight room has mercury-vapor lighting in the high portions and incandescent fixtures for side illumination. Floodlighting of the yard area is by incandescent lamps.

Landscaping makes the facility attractive in appearance.

J. P. Newell Puts . . .

The Railroads' Plight in Supply Manufacturers' Language

Speaking at the largest luncheon meeting in the history of the Railway Supply Group of the Union League Club of Chicago on January 9, J. P. Newell, vice-president—operation of the Pennsylvania, outlined the railroad industry's "streamlined five-point program of reforms that we think are necessary in the regulations that hobble us in our efforts to provide good transportation service." To "put over" his message, Mr. Newell put the representatives of the supply industry into the railroad man's shoes as he pictured the situation in this manner:

(1) *Passenger Train Losses.*—"We ask the right to take off the market, and take off the market quickly, services that cost us millions of dollars a year—and for which there is little or no sale.

"That seems a curious right for a businessman to be asking. When you realized ten or twelve years ago that we were no longer buying oil hand lanterns for our trainmen and shopmen and car inspectors—an item you used to sell us by the hundreds of thousands—you stopped making oil hand lanterns. You switched to electric hand lanterns or forgot about oil lanterns completely.

"But had you been a railroad, you would never have gotten away with such a simple and sensible procedure. You would still be putting millions of dollars of capital and labor and executive time into the manufacture of oil hand lanterns. You would sell a few here and there, but not many—and you would probably get all kinds of complaints about the few you did sell. How you would make up the millions of dollars you were throwing out the window, with little return other than complaints, would be your problem—and nobody would bother to wish you luck with it. The best word you would get is, 'Well, we'll look around a couple of months, think it over a few more, and maybe we can ease your loss by a couple of thosuand or so. Meanwhile, keep 'em coming, and see that they are all *good* oil hand lanterns. We've heard criticisms.'

"So one point of the railroads' reform program is simply this: *Where pressures on state commissioners compel us to keep passenger trains running that are no longer profitable or performing a public service, we want the right to appeal to the Interstate Commerce Commission.* Isn't that a reasonable request?

(2) *Long-&-Short-Haul Clause.*—"A second relief we are asking is the repeal of the long-and-short haul rule. This applies to us but not to highway or air transport. It forbids us to charge less for a long haul than for a shorter one going in the same direction and, on the surface, sounds logical and hardly a handicap. But you wouldn't, I can assure you, want to live with it in your business. Let me illustrate:

"You hear of a chance to sell a thousand car wheels to a shop 800 miles from your plant. But you have a competitor located only 500 miles from the customer's shop. The customer may agree that your wheels are somewhat superior—but not enough to make up for the additional 300 miles of freight charges. If you want the business enough to pay the additional 300 miles of freight yourself, you are free to do so. You are at liberty to compete with the other fellow by taking a smaller profit—a thing any sensible businessman does when it is to his advantage.

J. P. Newell

"But in similar circumstances a railroad can't. A long-haul contract trucker may sharply reduce his rate on a commodity moving between New York and Pittsburgh in order to take a piece of business away from the railroad. The railroad can reduce its rate too, provided it also reduces the rate for every intermediate point between New York and Pittsburgh—and, in addition, receives I.C.C. approval of each and every change. Or it can ask, backed up by a mountain of data, the commission's permission to forget the long-and-short-haul clause for the moment. But the mills of the commission, like those of the gods, grind with exceeding slowness. By the time approval comes through—if it does—the piece of business has been secured by the trucker and lost to the railroad. Nor is that sort of thing something that happens to us only occasionally—it happens day in and day out, and with the most lucrative classes of freight.

"From this you can see why *the railroads feel the long- and short-haul clause makes them sitting ducks for long-haul truck competition,* and why we want the rule abolished. It's a relic of 1887—before anyone had heard of a truck.

(3) *Rate Making.*—"Another outmoded rule that hobbles us bears the catchy name 'rule of rate making,' and is based on an even catchier set of synthetic economics. I don't think you would care to have to set your prices by it—as the I.C.C. requires us to do. You would find yourself, for example, obliged to set prices that had less relation to your cost of doing business than to the possible distant effect they might have on your volume of business. That sounds pretty complicated and I can assure you it is. What it amounts to, actually, is that the commission decides whether a rate the railroad proposes is good for the railroad, and gives or withholds its approval accordingly. That is the sort of thing conscientious mothers decide for small children, but which railroad men would rather decide for themselves—taking the business consequences for any mistakes or

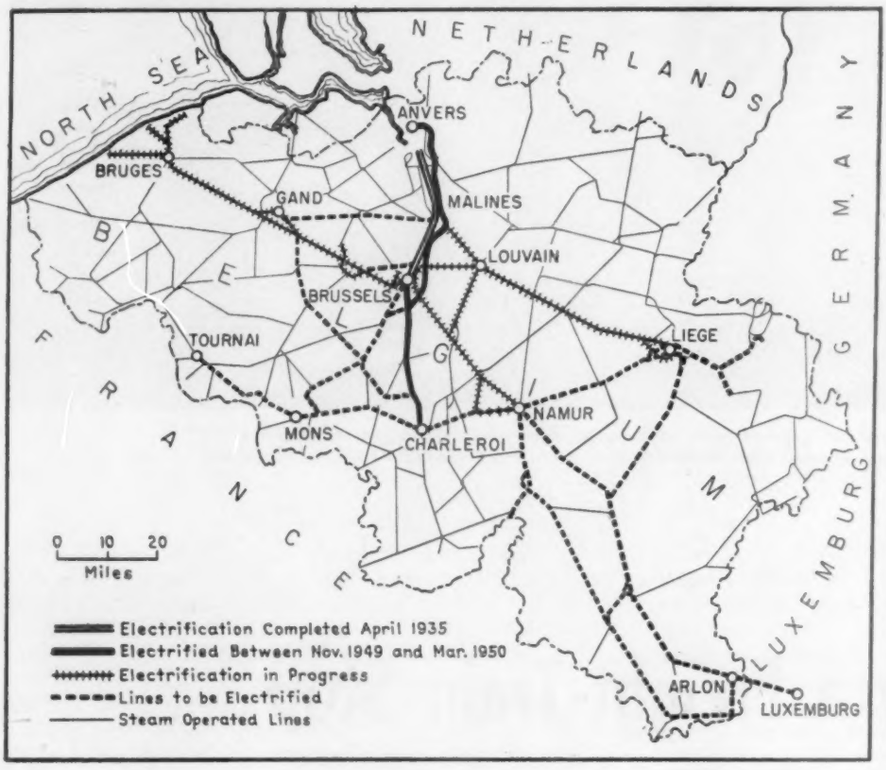
BELGIUM MAPS EXTENSIVE ELECTRIFICATION PROGRAM

By John W. Ashton

Electrification of a considerable part of the Belgian railroad system, including modernization of equipment, is being undertaken by the Societe Nationale des Chemins de Fer Belges. When completed, it will form the nucleus of an electrified network reaching into France, Holland and Germany.

The original plan, set up before World War II, foresaw the establishment of a modest electrically powered network, covering just over 100 miles. This plan was repeatedly modified until, at the close of the war, it had become an ambitious program for the rapid electrification of 1,000 miles of line, meaning that 30 per cent of Belgian locomotives would become electrically operated, and would haul some 70 per cent of the country's total railroad traffic.

Results so far achieved include the total electrification of the Brussels South and North Stations, the completion of an underground junction between the two stations, and two lines linking the coal basin of Charleroi to Brussels and Antwerp. Passenger traffic on these two lines has increased 20 to 25 per cent since the lines were electrified. This figure is expected to be surpassed when the Charleroi line is run into the new Brussels Central Station in 1953.



Although services have been improved and the number of trains increased as much as 80 per cent, it is estimated that the two lines alone will show a profit of $1,400,000 a year, with 80,000 tons of coal being saved.

Steam locomotive types used by the Belgian railroads are varied, but only one type of electric locomotive is in use. This develops 2,700 hp. and is equipped with 4 motors. It is capable of hauling passenger trains at speeds up to 90 m.p.h. and freight trains at 30 to 35 m.p.h.

In addition there will be 20 diesel "auto-rail" cars, of which 10 are already in service. They are driven y Belgian or General Motors engines. Each of the two motors of the larger type cars develops 178 hp.

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wrong guesses they may make. What happens, however, is that the commission in effect does the deciding, leaving the railroad saddled with the consequences. *We want the rule of rate making simplified and relaxed to the point where railroad men, who work and live with their shippers, are allowed to stand or fall on their own decisions*—just as you have to do in your business.

(4) ***Delayed Increases.***—"Our fourth reform concerns a situation which you would find just about intolerable. When the labor or material costs on something you're making for us go up while you are making it, you note the increase on the bill and, in general, we pay it. But not so with the railroads. General rate increases for them are not that prompt. Actually, it takes an average of 350 days to get them—if and when we do—and even then they are not retroactive.

"We have to live with and by commission rulings. We know that. But we do think they should be geared to life in this modern, inflationary day and age. *What we propose is that new rates may go into effect 30 days after we submit proof of their necessity—with the commission reserving the right to penalize us for any error we may have made in our own favor.*

(5) ***Subsidy of Competitors.***—"Finally we ask that our problem of subsidized competition be recognized and dealt with realistically. The railroads have, in addition to one another, four very aggressive competitors—all but one of which (the pipelines) are heavily subsidized. Suppose in addition to your normal competition, you had three aggressive competitors whose factories were furnished and maintained for them free, or at ridiculously nominal rates. You would want something done about that, and that's just what the railroads want.

"*Therefore, as our fifth reform, we are asking that each form of transportation be required to pay the full cost of providing that transportation, including its fair share of the cost of facilities now provided free or at cut rates.* Only in that way, can each form of transportation compete on its own merits. Open, free competition governs the economics of production and manufacturing in your companies. It should be the principle governing the transportation which you use."

Although there may be differences of opinion as to techniques, the speed of freight trains can be controlled without danger of breaks. One method for such control is described herein.

Says J. S. Swan . . .

Don't Hurry a Freight-Train Stop . . .

- ***Start brake application in ample time***
- ***Complete each reduction to end of train before starting another***
- ***Stretch train with power***

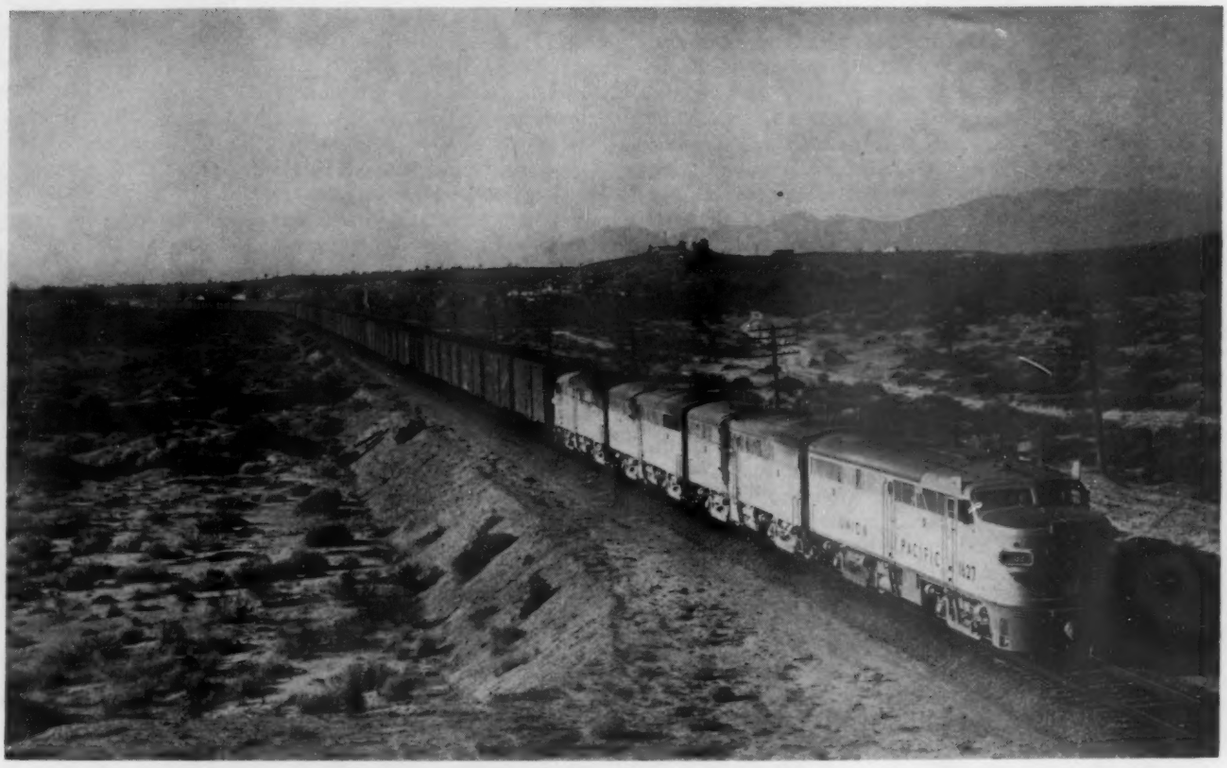
The technique of controlling the speed of long freight trains is a subject on which there are many differences of opinion. The method described here is employed on the Louisville & Nashville, with results which are said to be exceptionally good. It was outlined in a paper presented to the Southern and Southwestern Railway Club at Atlanta, Ga., on November 20, 1952, by J. S. Swan, superintendent of locomotive operation of the railroad.

Three factors are involved: (1) start the slow-down in time; (2) allow time to complete one brake-pipe reduction to the rear end of the train before starting another; (3) keep the train stretched by working the locomotive.

The method outlined, said Mr. Swan, is suitable for an empty train, a loaded train, or a train with mixed loads and empties, regardless of their location in the train, or the profile of the track, the speed, or inequality in braking percentages involved. He declares that the speed of the train can be controlled at all times by the engineman, without any fear of breaking the train in two.

Why Slack Action is Severe

The reason for the use of this method of braking is that, with it, slack action between loads and empties can be controlled. As Mr. Swan explained it, the empty freight car has a braking force of 60 per cent of the light weight of the car. If it is assumed that the empty car weighs 40,000 lb., then the braking force is 24,000 lb. If this same car is loaded with 100,000 lb., the total weight of the car will be 140,000 lb. instead of 40,000 lb. The braking per cent will then be changed from 60 to 17. The loaded car braking at 17 per cent has a retardation of about 1 ft. per sec. per sec. The empty car, retarding at 3.28 ft. per sec. per sec., will stop three times as fast as the loaded car.



"The most important feature in connection with smooth handling of freight trains is the application of the air brake in sufficient time so that both the speed and the slack can be properly controlled."

This is why, with empties ahead of loaded cars, the loads run the slack into the empty cars and make rough handling of the train. With the loads on the head end of the train and the empties on the rear, the rear of the train will be stopped three times as fast as the head end is. Then the train may be broken in two, or a severe jerk will take place by the run-out of slack on the head end.

Most Important Feature

Mr. Swan said the most important feature in connection with smooth handling of freight trains is the application of the air brake in sufficient time so that both the speed and the slack can be properly controlled. Slack can be controlled with the proper operation of the engine throttle and the automatic brake valve to the extent that damage to the equipment and lading and injury to personnel will be overcome. The engineman should be educated how to stretch the slack with the air brake and the throttle, and endeavor to maintain such conditions until the slow-down or stop is completed. Damage to the equipment and lading results from quickly changing the slack. It will not be necessary to change the slack when working power. In this case the slack will be stretched.

Enough power should be used to prevent the run-in and run-out of slack on the head end of the train, Mr. Swan went on to say. As the speed of the train reduces the pulling power of the locomotive increases rapidly at lower speeds and might become great enough to part the train if the throttle is not reduced. The throttle should be in idle position on the diesel by the time the train comes to a stop and not after it is stopped. If a stop is made with power on the locomotive, the train will break in two.

Most of the inequality of braking per cent can be overcome, according to the speaker, by the following method of reducing speed on freight trains of 70 or more cars:

1. Start in time.
2. Reduce the locomotive throttle to No. 6 position if it is in No. 8 or No. 7.
3. Do not allow the engine brake to apply.
4. Make a 7-lb. reduction from the equalizing-reservoir pressure with the automatic brake valve in service position and lap the valve as soon as the reduction is completed. As soon as the brake-pipe exhaust stops at the automatic brake valve, place the handle in the running position. Leave it there not less than 10 sec. It may be in running position longer, depending on the length of the train and braking per cent of the cars.
5. Make a second reduction of 5 lb. from the equalizing reservoir pressure with the automatic brake valve in service position and lap the valve after the reduction is completed. When the brake-pipe exhaust ceases at the brake valve, move the handle to the running position and leave it there as described in step No. 4.
6. Make the third reduction of 5 lb. as described in steps Nos. 4 and 5.
7. The handle of the automatic brake valve is now in running position. Leave it in that position if the speed of the train has been reduced to the desired speed. This makes a total reduction of 17 lb. from the brake pipe, which will insure the release of the brakes on a long freight train. If the speed of the train is not reduced to the desired speed, continue to make 5-lb. reductions from the brake pipe as described above until the speed is reduced as desired. If it is desired to stop the train after an application has been started, it can be stopped in the foregoing manner by continuing the reduction of

the brake-pipe pressure until the train comes to a stop.

Moving the brake valve to the running position for not less than 10 sec. after each reduction of the brake pipe will allow the brake-cylinder pressure on the head end of the train to be reduced and will gently stretch the slack. This will prevent harsh slack action that can cause the train to be broken in two. If the brake valve is left in lap position after the brake-pipe exhaust ceases, the brake-pipe leakage will reduce the brake-pipe pressure and increase brake-cylinder pressure on the head end of the train. This will cause the slack to be bunched on the head end of the train and, when the brake is released, the slack will run out and break the train in two.

When stopping a train while backing at a moderate or low rate of speed, or when taking slack on a hill with loads or empties or mixed loads and empties, the train should be stopped when backing by the same method, said Mr. Swan. When taking slack on a hill with the air brake, the initial 7-lb. reduction should be made before the train starts to move backward. After the brake valve has been moved to the running position, the diesel will be reversed and the throttle will be opened to start the locomotive moving backward. Then a 5-lb. reduction should be made. As soon as the exhaust ceases to blow at the brake valve, the handle should be moved to the running position. Keep up the 5-lb. reductions until the train comes to a stop. Close the throttle just before the train is stopped. If the train is stopped before the braking cycle is completed, continue the reduction until the brake pipe has been reduced sufficiently to insure the release of the brakes.

Application Timing on a Long Train

The release time should be governed by the number of cars in the train: 1 min. for 30 cars; 2 min. for 60 cars; 3 min. for 90 cars; 4 min. for 120, and 5 min. for 150 cars. The cars will be started one car at a time without any danger of pulling the train in two, the speaker declared.

With a train of 130 cars of 50 ft. per car, the train length will be 6,500 ft. With the AB brake, the air travels at 600 ft. per sec. in a service application. In about 10 sec. the brake on the 130th car will start to apply. In 20 sec. the rear brake cylinder has 10 lb. pressure and the brake cylinder of the first car, 12 lb. The brake valve is in the running position for 7 sec. before the pressure drops to 5 lb. in the brake cylinder of the first car. The 20th car has 10 lb. in the brake cylinder for 25 sec. and it does not drop while the brake valve is in running position. The 40th car has 10 lb. for 25 sec. The 130th car has 10 lb. in it for 25 sec. before it starts to increase. These three cars have about the same brake-cylinder pressure from the first reduction.

The second reduction of 5 lb. will change the brake-cylinder pressure in the No. 1 car from 5 lb. to 27 lb. in about 10 sec. and then it will drop to 4 lb. in about 20 sec. The 20th car will be changed from 10 lb. brake-cylinder pressure to about 20 lb. in about 5 sec. and then will drop to about 5 lb. in 15 sec. The 40th car will change from 10 lb. brake-cylinder pressure to about 22 lb. in 5 sec. and will drop to 5 lb. in 15 sec. The 130th car will change from 10 lb. brake-cylinder pressure to 15 lb. in 15 sec., which will not reduce.

With the third reduction of 5 lb., the first car changes from 5 lb. to 35 lb. in about 15 sec. and then the brake-cylinder pressure will drop to 5 lb. in about 20 sec. On the 20th car brake-cylinder pressure will be about 27 lb. for about 3 sec. and then will drop to about 5 lb. in about 20 sec. The 40th car changes from 5 lb. brake-cylinder pressure to 25 lb. in about 15 sec. and will drop to 5 lb. in about 10 sec. The 130th car will change from 25 lb. to about 33 lb. in 15 sec. and will remain with this brake-cylinder pressure until another reduction is made or the brakes are released. The brakes will start to release on the 130th car in about 4 min., with brake-pipe leakage of about 4½ lb. per min. With a greater leakage the release will take longer.

When necessary to use the conductor's valve on the caboose in order to comply with Air-Brake and Whistle-Signal Rule 121, too sudden opening of the valve with consequent quick action of the brakes will result in a rough stop. For a smooth service stop, the valve should be opened slowly, yet fast enough to obtain an application of the brakes, not to exceed 7 lb. Trainmen must exercise good judgment to see that the brake-pipe reduction is made gradually, allowing ample time and distance to obtain a smooth stop.

On diesel locomotives, as the speed reduces a higher ammeter reading will indicate to the engineman that the conductor's valve is being used.

As the speed of the train is reduced, the pulling power of the locomotive becomes greater and can cause the train to part. Therefore, as soon as the engineman is aware of the use of the conductor's valve, he will reduce the throttle as the speed of the train is reducing. Just before the train comes to a stop, the throttle should be in "idle" position. The independent brake should be applied to prevent slack drifting in and out on the head end of the train as, otherwise, the change in slack could cause the train to part.

Letter from a Reader . . .

TV Yard Installations Might Lead to Better Service

DULUTH, MINN.

TO THE EDITOR:

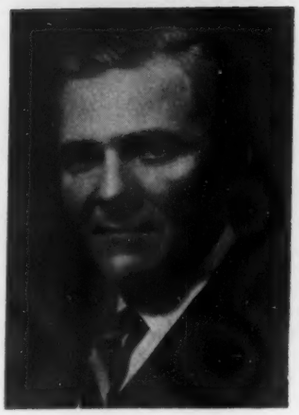
I have read with some interest your reports of experiments on the use of television equipment in railroad yard operations. It occurs to me that there may be further application of TV equipment which might be of definite advantage to the industry.

Part of my daily work is the tracing of cars. The seemingly interminable waits for messenger services to bring in yard checks is one of the most aggravating features of this work—both to me and to my customers. A TV installation might be designed to eliminate such annoyance, and to enable the railroad to maintain a record service that would be difficult to match in any other form of transportation.

It might be possible to accomplish this goal by placing a TV camera at each interchange track between railroads in busy terminal areas. The cameras might be hooked into the automatic block system in such a way that they would be started and stopped by the lining of proper routes from distant control towers and by the presence of a train on the track. Night and bad-weather operations might be covered through the use of infrared or black light. The camera might also be arranged so that if it gets out of order, a warning light appears in a nearby tower. Each installation should be equipped with a clock and a junction code number constantly in view of the camera.

The receiving set or sets would be located in the yard office, and might be hooked up to a motion picture camera to record incoming cars on film during hours when the office is closed.

MILTON F. MUNNS.



Patrick B. McGinnis

McGinnis Moves From NS to CofG

Callaway becomes honorary chairman; Dillard, vice-president, in series of changes involving three roads

Merrel P. Callaway

Central of Georgia directors, on January 16, elected Patrick B. McGinnis as chairman of their board, to succeed Merrel P. Callaway, who has become honorary chairman of, and advisor to, the board.

Upon his election to the chairmanship of the CofG, Mr. McGinnis resigned from his previous position as chairman of the board of the Norfolk Southern, and also gave up his corresponding position with various NS subsidiaries, including the Norfolk Southern Bus Company, the Norfolk Southern Warehouse Company, the Princess Anne Power Company, the North Carolina Warehouse Company, and the Euclid Delevopment Company. In moving to the CofG, Mr. McGinnis also will succeed Mr. Callaway as chairman of the board of the Ocean Steamship Company, a wholly owned subsidiary of the Central.

Other January 16 actions by CofG directors, coincident with Mr. McGinnis' election as chairman, included:

Election of C. Newton Kidd, senior partner in the investment banking firm of Stein Brothers & Boyce, of Baltimore, as chairman of the board's executive committee—like Mr. McGinnis, Mr. Kidd has resigned from the corresponding position on the Norfolk Southern to join the Central;

Election of William E. Dillard, who, for the past year, has been general manager of the Central, as vice-president and general manager;

Election of Harry H. Kiernan, who has been associated with Mr. McGinnis in various railroad enterprises, as assistant to the new chairman; and

Election to membership on the board of Charles C. Hertwig, president of the Bibb Manufacturing Company, of Macon, Ga., and of Alexander Calder, Jr., of New York, executive vice-president of the Union Bag & Paper Corp. Mr. Hertwig succeeds William D. Anderson, also of Macon, who has resigned after 29 years on the Central's board.

Also on January 16, directors of the Savannah & Atlanta, which is owned by the Central, elected Oliver D. Appleton as chairman. Mr. Appleton is a member of the New York investment firm of Cyrus J. Lawrence & Sons.

Mr. Callaway, whose career was reviewed in detail in *Railway Age* May 13, 1950, page 43, has served for the past 11 years as trustee or chairman of the board of the CofG. For about nine months between the death of Marion J. Wise and the election of the Central's present president, Ben J. Tarbutton, Mr. Callaway was both president and chairman. In continuing as honorary chairman and advisor to the board, Mr. Callaway will continue to maintain an office in the Central's executive building, devoting his entire time to the service of the railroad, and performing certain specific duties. In addition thereto, he will continue as trustee of the property, handling various unfinished matters in connection with the trusteeship.

Mr. McGinnis, the new CofG chairman, is, by profession, an investment banker, with his own firm, McGinnis & Co., in New York. His early career, following his 1926 graduation from St. Lawrence University, was in the financial field, where he specialized in railroad securities, and gained wide recognition as an authority on such securities, and also on railroad reorganizations. In 1943 and 1944 he served as a consultant to the Office of Defense Transportation; and since 1947 he has been board chairman of the NS.

Although some of his policies in connection with that company have been the subject of criticism and of investigation by the Interstate Commerce Commission, the company's achievements under his chairmanship are generally considered in railroad circles to have been outstandingly successful. Gross operating revenues increased from $7.9 million in 1946—the year before Mr. McGinnis assumed the chairmanship—to $11.6 million in 1951, while operating expenses, in the same period, went up from $6.9 million only to $8.8 million.

As a result, the operating ratio—though it has shown rather wide fluctuations—was 75.90 in 1951, compared with 87.44 in 1946. In the earlier year, the company had a deficit after fixed charges; in the later year, fixed charges were earned 7.73 times before taxes and 4.35 times after taxes. In the same six-year interval, total debt was cut approximately in half, even though, because of an extensive dieselization program, outstanding equipment trust certificates just about doubled. As a result, the common stock has been a regular dividend payer since 1948, and has approximately quadrupled in market value, making it sufficiently attractive to investors to justify a two-for-one split last year. These favorable results can be attributed largely to an increase in revenue ton-miles handled, from 580 million in 1946 to 791 million in 1951, and to more efficient operations, which increased freight-train-mile earnings from $8.40 in 1946 to $11.77 in 1951. Results for the first 11 months of 1952 indicate that these favorable revenue and earnings trends have continued.

(*Continued from page 18*)

"We shall be ready," Mr. Mackie said, "to meet these plaintiff truckers in court on the fairy tale allegations they have made. From what I have heard, these charges are so fantastically absurd that they smack more of Alice-in-Wonderland than a serious legal action."

Mr. Swinehart's statement was as follows: "To accuse a public relations firm of such effective control of public opinion might be regarded in some quarters as very flattering. It is not very flattering to the American people, however. They have always been able to make up their own minds when they have the facts. Presenting the facts is our business. Since when has there been anything wrong with this in America?"

Railroads named as defendants included, along with their individual chief executives, the Pennsylvania; New York Central; Cleveland, Cincinnati, Chicago & St. Louis; Chesapeake & Ohio; Norfolk & Western; Baltimore & Ohio; Reading; New York, New Haven & Hartford; Lehigh Valley; Lehigh & New England; Delaware, Lackawanna & Western; Virginian; Delaware & Hudson; Rutland; Erie; Western Maryland; Pittsburgh & West Virginia; New York, Chicago & St. Louis; Bangor & Aroostook; Boston & Maine; Central of New Jersey; Maine Central; New York, Ontario & Western; Wheeling & Lake Erie; Akron, Canton & Youngstown; Lehigh & Hudson River; New York, Susquehanna & Western; Union; Canadian Pacific, and Canadian National. Martin W. Clement, Gustav Metzman and R. W. Brown also were named as defendants, both individually and as former presidents, respectively, of the PRR, the NYC and the Reading.

Covey Heads Atlantic States Board for 1953-54

At the annual meeting of the Atlantic States Shippers Advisory Board, held at Baltimore, January 14 and 15, the board approved unanimously its L. C. L. Sub-committee's report praising the Rochester, N. Y., shipper-sponsored plan for channelizing outbound l. c. l. shipments to the best service route.

The board elected as its new president R. E. Covey, assistant traffic manager of the American Sugar Refining Company. Other officers for 1953-54 are: First vice-president, C. B. Roeder, general traffic manager, American Home Foods, Inc.; second vice-president, C. S. Decker, general traffic manager, Borden Company; and general secretary, J. R. Morton, general traffic manager, San-Equip, Inc. Retiring President W. W. Weller, eastern traffic manager of the Weyerhaeuser Sales Company., was elected chairman of the executive, committee, while F. J. Murphy was reelected secretary of the board.

H. H. Pratt, retiring chairman of the executive committee and general traffic manager of the Crucible Steel Company of America, suggested, for the committee, that perhaps some overhauling and modernizing of the board's machinery might be in order. It was the committee's thought that this applied particularly to the method of forecasting carloadings. Mr. Pratt also suggested more frequent meetings of sub-committees of the Railroad Contact Committee with the various shipper subject committees; and asked the board to think over the possibility of having just two full-scale meetings each year.

C. R. Megee, vice-chairman, Car Service Division, Association of American Railroads, reported on national transportation conditions, stating that, with a national forecast for increased carloadings in the first quarter of 1953, there is little cause for "complacency" about car supply, "at least during the first half of 1953. There will be a continuing need for the effective work of the Car Efficiency Committees." Mr. Megee said that, while net gain in freight car ownership during 1952 had been a disappointing "slightly more than 5,000 cars," the situation for 1953 looks somewhat better, with net gain of about 35,000 cars expected.

Loss and Damage

In a special panel discussion on loss and damage, moderated by R. C. Avery, manager, claim division, traffic department, Neisner Bros., Inc., and chairman of the board's Loss and Damage Committee, C. A. Naffziger, director of the A. A. R.'s Loss & Damage Prevention Section, said that, since loading pamphlets put out by his section are free to shippers he does not see why they are not more widely used. He also stated that his organization soon would bring out an index to all its publications on loss and damage prevention. E. G. Overmire, superintendent, loss and damage prevention, New York Central, described board area railroads' use of movies, posters, speed tests, impact recorders, etc., in efforts to teach careful handling of cars. H. A. Sides, freight claim agent, Pennsylvania, and C. E. Thrasher, general freight claim agent, Baltimore & Ohio, told of the forces their railroads have established to help in the prevention effort. Each of these railroads has at least one loss and damage prevention man on each of its operating divisions, in addition to other prevention personnel who work out of general headquarters.

C. H. Colyer, assistant traffic manager, Carrier Corporation, in answer to a question about shipper-consignee cooperation in eliminating damage, stated that Carrier has developed an "OS&D" report which accompanies every shipment, carload or l. c. l. The consignee is asked to return this form, with notations as to damage to the shipment and apparent cause therefor. Mr. Colyer said receivers are doing a good job of returning the report, and that replies are helping Carrier do a better job of loading, bracing and packaging. Mr. Pratt said his company does not use such a form, but has its salesmen contact receivers to see if damage is occurring in shipments, and if there is trouble, what is its apparent cause. W. K. Cabot, traffic manager, Johnson & Johnson, said his company does not call the attention of the shipper to each bit of damage as it occurs, but "OS&D" reports are filed with

Briefly . . .

. . . Book-type passenger tickets have been substituted for conventional interline tickets at all U.S. and Canadian city ticket offices of the Great Northern. The road plans to continue to use the familiar pasteboard or card tickets for local travel and conventional interline tickets will continue to be issued at station agencies for a limited period.

. . . Color recommendations of the National Safety Council have been adopted as standard for locomotive and car shops by the St. Louis-San Francisco. The colors aid in rapid identification of protection equipment, obstructions and hazards; ease eye strain, and promote good housekeeping. They include: For fire protection—red; "alert!"—orange; precaution — blue; traffic — white, gray and/or black; safety equipment—green, etc.

. . . The Missouri Pacific has ordered 100 additional "Speedboxes" for its "Eagle" merchandise service.

. . . January is a month of birthdays for the Chicago & North Western's fleet of "400" daytime streamliners. The original "Twin Cities 400"—which earned its name by traveling approximately 400 miles in as many minutes—began life 18 years ago on January 2 as a steam powered train of conventional, though modernized equipment. In the intervening years it has been streamlined and "re-streamlined" several times. January 12 marks the 11th birthday of the road's "Peninsula," "Commuter," "Shoreland," "Valley," and two "City of Milwaukee 400s."

freight bills and when the amount of damage seems to demand such action the reports are analysed and bad situations are handled with the shipper.

The L. C. L. Committee went on record as favoring the Rochester, N. Y., plan for channelizing l. c. l. traffic, which is expected to go into operation about March 15. This plan is a variation of the "Griffin Plan," except that, where the Griffin Plan, as set up in Connecticut's Naugatuck valley, specifies complete route to destination, the Rochester plan specifies only the origin carrier (five railroads serve Rochester), leaving the rest of the routing to be supplied by the carrier first handling the shipment. The committee expressed the hope that there would be trials of a similar plan at other cities.

P. K. Partee, chairman of the Railroad Contact Committee and general manager of the B&O at New York, said railroads serving the board area will try to do a better job of informing shippers promptly of changes in times of scheduled freight trains. Also he said, the carriers are preparing a list of appropriate persons for shippers in the board area to contact for tracing information.

Mr. Partee introduced C. W. Wright, president of the American Railway Car Institute, who told something of the progress railroads have made in the past 40 years in supplying larger and better freight cars. Shippers, however, wanted more "dope" on what railroads are putting on, or in, those cars to make freight safer while in transit. W. S. Dietrichson, general mechanical engineer, American Car & Foundry Co., New York, said many such devices are not being more widely applied because of expense. Car builders, Mr. Dietrichson said, could build cars incorporating any or all of the latest devices designed to prevent damage, but the cars produced would cost the carriers a lot more than those they are now buying.

Motive Power and Car Equipment of Class I Railways (including Class I Switching and Terminal Companies)

Item	October 31 1952 number	October 31 1951 number	October 31 1946 number	Per cent of change 1952 vs. 1951	Per cent of change 1952 vs. 1946
Locomotives assigned to yard switching service:*					
Steam	4,229	5,825	10,868	— 27.4	— 61.1
Diesel-electric	7,232	6,413	2,607	+ 12.8	+177.4
Electric	180	178	167	+ 1.1	+ 7.8
Other	10	14	18	— 28.6	— 44.4
Total	11,651	12,430	13,660	— 6.3	— 14.7
Locomotives assigned to road freight service:*					
Steam	10,145	13,446	21,015	— 24.6	— 51.7
Diesel-electric	6,049	4,730	592	+ 27.9	+921.8
Electric	248	276	320	— 10.1	— 22.5
Other	8	3	3	+166.7	+166.7
Total	16,450	18,455	21,930	— 10.9	— 25.0
Locomotives assigned to road passenger service:*					
Steam	2,174	2,972	5,873	— 26.9	— 63.0
Diesel-electric	1,668	1,418	366	+ 17.6	+355.7
Electric	264	254	286	+ 3.9	— 7.7
Total	4,106	4,644	6,525	— 11.6	— 37.1
Motor cars (rail) owned	2,595	2,628	2,630	— 1.3	— 1.3
Freight cars owned	1,765,571	1,754,874	1,754,303	+ .6	+ .6
Passenger-train cars owned	34,779	36,036	36,284	— 3.5	— 4.1

*The count for diesel-electric and electric locomotives represents the number of locomotives, i.e., any combination of locomotive units operated under a single control at the close of each month.

—From the January 14, 1953, issue of "Monthly Comment," published by the I.C.C.'s Bureau of Transport Economics and Statistics.

Senate and House Committees Named

Committees on interstate and foreign commerce for the new Congress have been appointed in the Senate and House of Representatives.

As had been anticipated, Senator Tobey, Republican of New Hampshire, succeeded Senator Johnson, Democrat of Colorado, as chairman of the Senate committee; and Representative Wolverton, Republican of New Jersey, succeeded Representative Crosser, Democrat of Ohio, as chairman of the House committee.

Members of the two committees are as follows:

SENATE

Republicans:
Charles W. Tobey, New Hampshire, Chairman
Homer E. Capehart, Indiana
John W. Bricker, Ohio
Andrew F. Schoeppel, Kansas
John M. Butler, Maryland
John S. Cooper, Kentucky
Dwight Griswold, Nebraska
Charles E. Potter, Michigan

Democrats:
Edwin C. Johnson, Colorado
Warren G. Magnuson, Washington
Lyndon B. Johnson, Texas
Lester C. Hunt, Wyoming
John O. Pastore, Rhode Island
A. S. Mike Monroney, Oklahoma
George A. Smathers, Florida

HOUSE OF REPRESENTATIVES

Republicans:
Charles A. Wolverton, New Jersey, Chairman
Carl Hinshaw, California
Joseph P. O'Hara, Minnesota
Robert Hale, Maine
James I. Dolliver, Iowa
John W. Heselton, Massachusetts
John B. Bennett, Michigan
Richard W. Hoffman, Illinois
John V. Beamer, Indiana
William L. Springer, Illinois
Alvin R. Bush, Pennsylvania
Paul F. Schenck, Ohio
Joseph L. Carrigg, Pennsylvania
Herbert B. Warburton, Delaware
Steven B. Derounian, New York
Thomas M. Pelly, Washington
J. Arthur Younger, California

Democrats:
Robert Crosser, Ohio
J. Percy Priest, Tennessee
Oren Harris, Arkansas
Dwight L. Rogers, Florida
Arthur G. Klein, New York
Thomas B. Stanley, Virginia
William T. Granahan, Pennsylvania
F. Ertel Carlyle, North Carolina
John Bell Williams, Mississippi
Peter F. Mack, Jr., Illinois
Homer Thornberry, Texas
Louis B. Heller, New York
Kenneth A. Roberts, Alabama
Morgan M. Moulder, Missouri

Other committee changes for the new Congress include the appointment of Senator Smith, Republican of Missouri, as chairman of the Senate committee on labor and public welfare. He succeeded Senator Murray, Democrat of Montana, who has become the committee's ranking minority member. This committee handles all labor legislation and social security matters, including those relating to the Railroad Retirement Board.

"Miamian" Derailed

Four passengers and three train crew members were injured—but none fatally—when the Atlantic Coast Line's "Miamian" struck the rear end of a freight train in a thick fog near Fleming, Ga., at 2:50 a.m., on January 17.

The freight train, a northbound Southern extra operating on ACL tracks, had stopped to set off a car with a hot box, when it was hit. The three diesel units and four cars of the 19-car passenger train, plus the caboose and nine cars of the freight, were derailed.

C&NW Seeks Injunction On Commuter Fare Ban

In an effort to secure a temporary increase in suburban fares denied it by the Illinois Commerce Commission, the Chicago & North Western has petitioned the circuit court of Du Page county, Ill., for a temporary injunction against the commission's action.

The road first presented its case for commuter rate relief last July. After a series of hearings, the Illinois body took the case under advisement but as yet has taken no action on it. The road subsequently asked for a temporary increase of the same amount to take effect pending the permanent increase. The commission turned down this second request on January 14, and the road petitioned for an injunction two days later. The increases, which range from about 20 to 38 per cent, would only partially offset the C&NW's $3.1-million suburban service deficit, the road said.

Freight Car Loadings

Loadings of revenue freight in the week ended January 17 totaled 705,479 cars, the Association of American Railroads announced on January 22. This was an increase of 17,247 cars, or 2.5 per cent, compared with the previous week; a decrease of 42,181 cars, or 5.6 per cent, compared with the corresponding week last year; and a de-

crease of 74,271 cars, or 9.5 per cent, compared with the equivalent 1951 week.

Loadings of revenue freight for the week ended January 10 totaled 688,232 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, January 10

District	1953	1952	1951
Eastern	118,521	129,991	142,145
Allegheny	140,639	154,792	159,055
Pocahontas	51,822	61,501	63,287
Southern	127,386	136,421	140,222
Northwestern	74,958	81,514	84,207
Central Western	114,968	118,431	128,669
Southwestern	59,938	62,060	65,430
Total Western Districts	249,864	262,005	278,306
Total All Roads	688,232	744,710	783,015
Commodities:			
Grain and grain products	45,834	54,154	57,195
Livestock	9,570	9,840	10,611
Coal	136,673	168,472	168,774
Coke	14,527	16,482	15,950
Forest products	41,777	44,146	50,227
Ore	19,668	18,004	17,128
Merchandise l.c.l.	63,624	67,519	79,828
Miscellaneous	356,559	366,093	383,302
January 10	688,232	744,710	783,015
January 3	563,085	610,116	662,427
Cumulative total 2 weeks	1,251,317	1,354,826	1,445,442

In Canada.—Carloadings for the seven-day period ended January 7 totaled 55.832 cars, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
January 7, 1953	55,832	24,899
January 7, 1952	61,469	29,704

Railroad Fined

The Interstate Commerce Commision has been advised by the Department of Justice that on December 12, in the U. S. District Court for the Northern District of Ohio, judgment was entered in favor of the government and against the carrier in the sum of $3,000 and costs in the case of *U. S. v. Chicago Great Western.*

"This was a civil penalty for failure to comply with the provisions of Service Order No. 866, issued by the commission and prescribing railroad operating regulations for freight car movement in the existing emergency." G. W. Laird, acting secretary of the I.C.C., said in a December 29 statement to the press.

IS HE AMERICA'S OLDEST FREIGHT TRAFFIC AGENT?

E. W. Schofield, freight traffic agent of the Nashville, Chattanooga & St. Louis at Chattanooga, Tenn., has entered his 75th year of continuous service with the NC&StL. W. K. Tate, vice-president in charge of traffic, reports that Mr. Schofield is "actively and effectively covering his territory" which comprises sections of middle Tennessee and northern Alabama. Mr. Schofield, according to company records, is 91. A recently adopted policy of the management will force his retirement.

THE MARCH OF DIMES gets a start on the Grand Trunk Western with Engineman (junior grade) Stevie Rosguz—a 4½-year-old polio victim—at the throttle. Here John Pullen, vice-president of traffic of the GTW and Canadian National, crowns Stevie honorary engineer of the system with a special dime-studded cap leading off the road's United States campaign for the March of Dimes.

Hook Named Deputy U.S. Postmaster General

Charles R. Hook, Jr., whose appointment as deputy United States postmaster general was announced recently by President Eisenhower (*Railway Age*, January 19, page 12), has been vice-president—personnel of the Chesapeake & Ohio at Cleveland since January 1, 1948.

Mr. Hook was born in Middletown, Ohio, on September 22, 1914, and was graduated from Yale University in 1937. He was employed by the Rustless Iron & Steel division of the American Rolling Mill Company, at Baltimore, from July 19, 1937, to January 1, 1946, resigning as assistant to general manager. Mr. Hook joined the C&O on July 15, 1946, as assistant to president—personnel, becoming vice-president—personnel in January 1948.

In 1946 he was appointed a member of a seven-man advisory council to assist the War Department general staff in personnel phases of the War Department's reorganization. He also served as an industry member of the National War Labor Board and as a management advisor for the Training Within Industry Division of the War Manpower Commission.

In 1944 Mr. Hook co-authored with Lee H. Hill a book titled "Management at the Bargaining Table." The same year he was appointed to the Committee on Labor Negotiations of the National Association of Manufacturers, and later became committee chairman. He is a director of the American Arbitration Association and a former director, for two terms, of the American Management Association.

As the industry member of the joint Bolivian-American Labor Commission named by the State Department, he spent several months in Bolivia in 1943, studying labor-relations at the tin mines.

Mr. Hook is a member of the Personnel Advisory Council of the American Management Association and formerly held the same position with the National Industrial Conference Board.

A photograph of Mr. Hook appears on page 8.

Use Railroads and Save Lives, Senator Urges

Senator Hunt, Democrat of Wyoming, has suggested that the Department of Defense use rail transportation to stop the "terrific loss of life" resulting from recent military airplane crashes.

"It occurs to me that to a very great extent, within the exterior borders of the United States, these catastrophes with their lamentable loss of lives could be nearly entirely stopped if, excepting in rare emergencies, we used rail transportation," he said.

The senator expressed his views in a January 9 letter to Secretary of Defense Lovett. He said the most recent crash, which took 41 lives near the western border of his own state, "could have been obviated if these men had been traveling by rail."

"In my travels about the United States, I don't see a great many members of the military establishment traveling by rail and neither have I seen a troop train since the start of the Korean war," he continued.

Aside from the terrific loss of life,

CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended January 17 were announced by the Association of American Railroads on January 22 as follows:

	Surplus	Shortage
Plain Box	23,041	356
Auto Box	630	53
Total Box	23,671	409
Gondola	7,187	119
Hopper	34,238	27
Covered Hopper	526	0
Stock	6,396	0
Flat	384	78
Refrigerator	3,842	0
Other	182	70
Total	76,426	703

the senator said, there is the secondary consideration of financial loss.

"No doubt many millions of dollars would have been saved in insurance payments and the cost of planes had we followed a practice of transportation by rail, except in emergency cases within the United States since the onset of the Korean war," he said "An off-the-cuff estimate would be at least $100,000,000," he added.

Rate Rises Total 130% In Britain; 79% in U.S.

Freight-rate increases made by British railroads between March 28, 1938, and December 1, 1952, aggregated 130 per cent, while advances made by railroads in the United States totaled 78.9 per cent.

This was shown by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in the latest issue of its "Monthly Comment." The figures also showed that 1951 average revenues per ton-mile were 36 per cent above those of 1938 in the United States, and up 90 per cent in Great Britain.

The bureau's discussion of the figures noted that average revenue per ton-mile realized by U.S. roads in 1950 was only 35 per cent above that of 1938, as compared with authorized freight-rate increases aggregating 57.3 per cent up to that time—a spread of 22 percentage points.

"In this connection," the bureau explained, "attention is called to the fact that average ton-mile revenue is affected not only by changes in the level of freight rates (which may not reflect the entire interstate authorization in the case of intrastate rates) but also by changes in the composition of traffic and in length of hauls for particular commodities. Rate reductions made to meet certain competitive and other situations also affect ton-mile earnings."

Tariff Research Group Issues More Bulletins

The Railroads' Tariff Research Group has distributed nine additional tariff improvement bulletins to publishing agents and tariff issuing officers of individual railroads. They are Bulletins Nos. 23 to 31, inclusive.

The tariff-making specifications set out in the bulletins were approved last month at a joint Philadelphia, Pa., meeting of the Railroads' Administrative Committee and the Cooperating Committee of the N.I.T. League.

Bulletin No. 23 prescribes a system to be observed nationally in the numbering of items in tariffs under which the first item in every tariff will be numbered 5 and succeeding items will be numbered in multiples of 5. In the itemization of separate lateral lines of matter in "checkerboard" tables, items will be numbered in multiples of 2. The bulletin excludes from its terms the rate sections in miscellaneous commodity tariffs, where commodity items are set up in alphabetical order.

Bulletin No. 24 promulgates a rule requiring that every tariff shall be assigned a number in the series of the issuing agent or railroad. This is the initial step in a program aimed at the development of a plan of distinctive numbering of all tariffs whereunder the number will reveal the kind and nature of each tariff. The bulletin further requires that reissues of tariffs be indicated by adding to their numbers capital letters of the alphabet in sequence.

Bulletin No. 25 deals with indexes of tariffs which, under I.C.C. tariff rules, must be supplemented monthly and reissued annually. Pursuant to special permission obtained from the commission, this bulletin puts the supplements on a quarterly basis and the reissues on an annual basis.

Bulletin No. 26 is designed to effect clarification of the intrastate status of tariffs filed with the I.C.C. It requires the addition to each tariff of a general rule affirmatively stating its intrastate application.

Bulletin No. 27 prescribes a guide to govern the preparation of tables of contents for tariffs.

Major Changes

Bulletin No. 28 requires major changes in the list of participating carriers in tariffs. As new tariffs are issued, and old tariffs reissued, the columns showing the forms and numbers ("FX" numbers) of powers of attorney and concurrences will disappear and there will be provided instead a column of item numbers which refer the user to special provisions of the tariff which abridge or otherwise affect the participation of individual carriers.

Bulletin No. 29 directs that, as tariffs are reissued, the tables of explanations of abbreviations and reference marks be placed as the concluding matter in tariffs and supplements where they will be readily located. The bulletin also directs that each supplement be self-contained with respect to explanations of reference marks; and that the terms "symbols," "characters," etc., be discontinued in favor of the uniform use of the single term "reference marks." This change has been authorized by I.C.C. Special Permission 55916 and corresponding permissions of state commissions.

Bulletin No. 30 prohibits the partial amendment of tariff items which embody narrative matter such as rules and regulations. The prohibition is supported by Amendment No. 6 to Special Permission 26878, issued by the I.C.C.

Bulletin No. 31 requires significant changes in the handling of tariff matter involved in suspension proceedings, the I.C.C. having authorized the changes in Special Permission 55963. Principal features of this bulletin are:

1. It gives carriers the option of suspending matter for the term prescribed in a commission order, or indefinitely.

2. It eliminates the necessity for filing individual sixth-section applications for authority to issue further-postponing supplements when the carrier initially elects to postpone the matter for the term specified in the order of suspension, and, responsive to the request of the commission, undertakes to further postpone the suspended matter.

3. It directs the complete cancellation of prior tariffs (when feasible and practical) and the bringing forward in the reissue, or its supplements, matter under suspension or matter continued in effect by reason of the suspension of some portion of the reissue.

4. When it is not feasible or practical to carry forward matter involved in suspension proceedings, tariff makers are directed to show prominently in the latest supplement to the old tariff a clear and concise description of the suspended matter or the matter held in force, as the case may be.

Teachers to Get Lesson In Railroading

The public school system of Hammond, Ind., is conducting a series of weekly meetings for teachers on "The Contributions of Labor, Business and Industry to the Economic and Social Life of the Community." The sessions are designed to acquaint the teachers with the economic base upon which their city is built.

"Railroad Night" in the series will be held on February 5, and all railroads of the Chicago area have arranged a program with traffic and operating officers in attendance. Highlight of the program will be an address by Thomas J. Sinclair, manager of the school and college service of the Association of American Railroads. The program, which will be held at the Hammond Technical High School, has been arranged through the Chicago Railroad Superintendents' Association.

Senate Group Studies Runaway Train Accident

The Senate committee on interstate and foreign commerce last week held a public hearing in connection with its investigation of the January 15 train accident at Washington's Union Station. As reported in *Railway Age* of January 19, page 18, the involved train was the Boston-Washington "Federal," which ran through the station gates and broke through the concourse floor, stopping just short of doors to the main waiting room. There were no fatalities. (See pages 14 and 15.)

The Senate committee's hearing got under way a few days before that of the Interstate Commerce Commission. The commission made a formal proceeding of its investigation, docketing it as Ex Parte No. 184 and assigning it for public hearing at Washington on January 15 before Commissioner W. J. Patterson and Examiner E. J. Hoy.

Senator Tobey, Republican of New

Hampshire, who had just become chairman of the group, presided at the Senate committee's hearing. At the opening session on January 21, members of the "Federal" crew on the day of the accident were heard.

Their testimony pointed up indications that there was an obstruction in the brake line (an out-of-place angle cock) between the third and fourth cars. Under such circumstances, the brake application made by the engineer would have been effective only on the locomotive and the first three cars. Questions of the senators went into the possibility that there had been "tampering" with the brake line.

The train-crew members agreed that "tampering" was a possibility, but they had no information which would support such a theory. It was also brought out that the brakes had worked "perfectly" between New York and Baltimore; but there had been brake "trouble" when the train was on the New York, New Haven & Hartford at Kingston, R.I.

C. D. Stewart, vice-president of the Westinghouse Air Brake Company, was scheduled to testify at the January 22 session of the hearing. New Haven employees who operated the train between Boston and New York were scheduled to appear at subsequent sessions.

H. W. Brower, the Pennsylvania engineer who operated the train from New York to Washington, said that the usual brake tests were made at the former point; and that he made 24 applications of the brakes between New York and Baltimore. On all of these occasions, the brakes were "working perfectly," Mr. Brower said.

"Tampering?"

This prompted Senator Tobey to suggest that, if there had been "tampering," it must have been done at Baltimore. The engineer agreed. Meanwhile, questions asked by Senator Pastore, Democrat of Rhode Island, brought out the fact that the PRR crew was not advised of the brake "trouble" on the New Haven at Kingston. It was Mr. Brower's position, however, that, even if he had been told of that situation, he wouldn't have been looking for brake trouble after he had experienced none in 24 applications.

The fireman, J. W. Moyer, corroborated the engineer's testimony, including his estimate that the train was traveling 35 to 40 m.p.h. when it "hit the bumper." Senator Tobey asked him if trains should not be equipped with an "alarm" system which could be sounded by the engineer in cases of brake failure or other emergency. Mr. Moyer agreed that such a system would be an additional safety device, but he didn't know whether it would be practical to install and maintain.

Conductor Thomas J. Murphy testified that he was in the third car at the time of the accident. He said he released the brake valve at the head-end of that car, but found "we had no air." Mr. Murphy could not say whether a brake cord had been pulled behind the third car.

He was followed by the baggageman, Fred King, who was in the fourth car. Mr. King said he "made an attempt" to reach the brake valve in that car; but was thrown around so much he did not know "whether I got it or not." The rear brakeman said he didn't hear the engine's warning whistle. He realized that the train was traveling too fast but the accident occurred before he could get to a brake cord.

ORGANIZATIONS

The 33rd annual meeting of the **Medical and Surgical Section** of the **Association of American Railroads** will be held at the Drake Hotel, Chicago, April 6. The **American Association of Railway Surgeons** will meet at the same hotel April 7-9. Members of the Medical and Surgical Section have been invited to attend the latter meeting.

The **Freight Loss & Damage Prevention Section** of the **Association of American Railroads** has announced that its first annual business session will be held at Chicago May 13. The date has been arranged to "sandwich" the section's meeting between two sessions of the annual meeting of the **Freight Claim Division,** which will meet in the same hotel (the Conrad Hilton) May 12 and 14. Program details will be announced later.

The next meeting of the **Mississippi Valley Maintenance of Way Club,** St. Louis, will be held on February 9, at the Hotel DeSoto, at 6:30 p.m. E. L. Anderson, chief engineer, St. Louis-San Francisco, will speak on "Why Reorganize Track Maintenance of Way Forces," and a Southern Pacific film, "The Tehachapi Earthquake," also will be shown.

Railroad Enthusiasts, Inc., New York division, will hold its next meeting on January 28, at 8 p.m., in Room 5928, Grand Central Terminal. Herman Rinke, tower director at Grand Central, will speak on "British Railways and the London Underground," illustrating his talk with movies.

The February meeting of the **New York Railroad Club** will be held on the fourth Thursday of the month, February 26, instead of on the regular "third Thursday" date. The program for the February 26 meeting will include announcement of winners of the club's third Roy V. Wright Memorial Essay contest.

The **Washington (D.C.) Passenger Association,** at its 36th annual banquet on January 7, turned administration of its affairs over to the following newly elected officers: President, R. T. Schlude, Missouri Pacific; vice-presidents, J. V. Flaig, St. Louis-San Francisco, and Lewis Wroe, Seaboard Air Line; and secretary-treasurer, K. H. Karriker, Chicago & North Western.

The **Cincinnati Traffic Club** will hold its 25th annual dinner-dance at the Netherland Plaza, February 10.

The **Transportation Club of St. Paul** will hold its 32nd annual dinner in the Hotel Lowry, February 3.

Fred W. Manley, division sales manager of the Minnesota Mining & Manufacturing Co., will be guest speaker at the 30th annual and 103rd regular meeting of the **Northwest Shippers Advisory Board** at St. Paul, January 28. Mr. Manley will speak at a joint luncheon session with the **Transportation Club of St. Paul.** W. E. Callahan, manager, Open Car Section, Car Service Division, Association of American Railroads, will describe the current transportation picture during the business session.

The **Communications Section** of the **Association of American Railroads** has elected C. O. Ellis, superintendent of communications of the Chicago, Rock Island & Pacific, as chairman to serve until December 31, 1954. R. A. Hendrie, general superintendent of communications of the Missouri Pacific, was elected vice-chairman for a similar term.

The **Fire Protection and Insurance Section** of the **Association of American Railroads** has selected St. Louis, and the Hotel Statler, for its 1953 annual meeting, to be held October 12, 13 and 14. The meeting has been timed immediately to follow Fire Prevention Week and to precede by one week the annual meeting of the National Safety Council.

SUPPLY TRADE

George D. Casgrain, Jr., has been appointed executive assistant of the **Union Asbestos & Rubber Co.** at Chicago. He will serve also as traffic manager for all divisions of the company.

Frank N. Reens, formerly sales engineer for the **Associated Handling Equipment Company,** has been appointed national sales manager of the **Karl A. Herman Company,** 412 Fuller avenue, N.E., Grand Rapids, Mich.

The **General Portland Cement Company** has announced the following appointments: **Melvin T. Power** as assistant general traffic manager at Chicago; **John T. Koehler** as traffic

manager at Chicago; **Fred R. Horton** as traffic manager at Dallas, Tex.; **Byron P. Weiler** as assistant traffic manager at Dallas, and **W. L. Peter** as assistant traffic manager at Houston.

Miss Maude F. Back, secretary and treasurer of **W. H. Miner, Inc.,** Chicago, has completed 50 years of service with that company. During her career, Miss Back has held positions in every department of the organization except the mechanical division.

James M. White has been elected vice-president in charge of manufacturing of the **American Car & Foundry Co.,** to succeed **Robert W. Ward,** who has retired after 42 years of service. He will have overall responsibility to determine and control manufacturing and related operations at all company plants, with headquarters at 30 Church street, New York. Mr. White was graduated from the

James M. White

Alabama Polytechnic Institute as a mechanical engineer, and in 1929 joined the Allis-Chalmers Manufacturing Company. He advanced steadily in position from engineer to vice-president in charge of manufacturing, holding that position from 1942 to 1948. In the latter year, Mr. White joined the Allen-Bradley Company as manufacturing executive, remaining there until joining A.C.F.

E. C. Bleam and **R. E. Goodfriend,** formerly sales representatives of the **Joseph Dixon Crucible Company,** have been promoted to district supervisors, with headquarters in Chicago and Columbus, Ohio, respectively.

P. C. Smith, formerly assistant to manager of the transportation and generator division of the **Westinghouse Electric Corporation,** has been appointed manager of the division.

C. Brenton Cook, formerly vice-president and a director of the **Elwell-Parker Electric Company,** Cleveland, has retired. Mr. Cook began his career by participating in development of the small gas turbine and the first Overland gas engine, before he obtained his electrical engineering degree at Rose Polytechnic Institute. He later became associated with the Allis-Chalmers Manufacturing Company and, in 1914, joined Elwell-Parker as Cleveland district salesman, subsequently

C. Brenton Cook

establishing the sales, advertising and export departments. He has been manager of sales promotion and advertising since 1915; was appointed export manager in 1921, and vice-president and a director in 1942. Mr. Cook designed the first mobile industrial type, 1,000-lb. revolving crane, and developed the first electric-powered fork truck in 1915. He patented the lift truck-trailer freight handling system and gave the industrial powered fork "Pallet" its name in 1930.

John Silver, formerly general manager of the communications and electronics division of **Motorola, Inc.,** has been appointed vice-president in charge of operations of the division. Mr. Silver joined Motorola in 1944 and was ap-

John Silver

pointed general manager of the communications and electronics division in 1949. His former affiliations included 12 years in engineering at Crosley Radio Corporation and several years as chief production engineer for Collins Radio, Cedar Rapids, Iowa.

The **Baker-Raulang Company,** Cleveland, has purchased the **Lull Manufacturing Corporation,** Minneapolis, to be operated as a wholly owned subsidiary under the name **Baker-Lull Corporation. LeGrand Lull** will be a director of the new subsidiary and of the parent company.

Wesley C. Newman, formerly traffic manager of the **Archer-Daniels-Midland Company,** has been appointed general traffic manager, succeeding **Judd F. Adams,** who has retired. **H. Gordon Burt** has been appointed traffic manager, to succeed Mr. Newman, and **Robert Landberg** has been appointed assistant traffic manager.

Donald S. Harworth has been appointed southern division sales manager of the **Farr Company** of Los Angeles. Mr. Harworth is a mechanical engineer and a graduate of the General Motors Institute. He recently completed his second tour of duty with the United States Army, and was discharged as a major.

Rogers Case, Jr., who recently returned from military service on Okinawa, has been appointed sales manager of **Transandean Associates, Inc.,** and of **Transandean Canada,** with headquarters at Orange, N.J.

Robert J. Haslett, office manager—sales of the **National Tube Company,** a subsidiary of the **United States Steel Corporation,** at Gary, Ind., has been appointed assistant to manager—sales, tubing specialties.

Charles H. Hobbs has been elected vice-president in charge of sales of the **Pyle-National Company,** to succeed **D. I. Packard,** who has resigned. **William C. Croft** has been elected vice-president in charge of manufacturing. The company also has appointed **Herbert F. Rothschild** as executive assistant.

Carl E. Nolte has been appointed traffic manager of the **Long-Bell Lumber Company,** to succeed **Fred C. Broadway,** who has retired. Mr. Nolte will maintain headquarters at Kansas City, Mo.

Roger E. Vaughan, formerly assistant general manager of the **Farrel-Birmingham Company's** plant at Buffalo, N.Y., has been appointed assistant general manager of its subsidiary, the **Consolidated Machine Tool Corporation,** at Rochester, N.Y.

William G. Christy has opened an office as consulting engineer at 37 Park Row, New York 38. Mr. Christy was formerly director of the Bureau of Smoke Control of the City of New York. Prior to his New York service he was

for some years smoke abatement engineer of Hudson county, N.J., during which he worked closely with the railroads in improving smoke conditions across the Hudson river from New York City.

Robert B. Algie has been appointed assistant vice-president — sales of the **Pittsburgh Screw & Bolt Corp.** Mr. Algie formerly was assistant manager of sales for the Jones & Laughlin Steel Corp., and recently was with the Forbes Steel Corporation.

The **Bridgeport Chain & Manufacturing Co.**, Bridgeport, Conn., has changed its name to **Round Bridgeport Chain & Manufacturing Co.** Bridgeport Chain has been associated for many years with Round Chain Companies and the name change is in keeping with a policy to identify individual companies more closely as members of the Round Chain group.

OBITUARY

William M. Ryan, retired president of the Ryan Car Company, died on January 3 at Chicago.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The **Burlington Refrigerator Express Company** has ordered 100 50-ton meat refrigerator cars and 30 70-ton mechanical refrigerator cars from its own shops. Delivery of the mechanical cars is scheduled for June and of the meat cars for July.

The **Western Pacific** will build 102 flat cars in its own Sacramento, Cal., shops.

LOCOMOTIVES

The **Missouri Pacific** has ordered 64 diesel units, including 47 for the MP, seven for the Union Railway (Memphis), five for the Gulf Coast Lines, and five for the International-Great Northern. The American Locomotive-General Electric Companies will build seven 1,600-h.p. "A" and 11 1,600-hp. "B" freight units and one 1,600-hp. passenger unit; Electro-Motive Division, General Motors Corporation, 38 1,500-hp. road-switching units (including five for the GCL and five for the IGN); and the Baldwin-Lima-Hamilton Corporation, seven 1,200-hp. switching units for the Union. Authorization for purchase of these locomotives was reported in *Railway Age*, December 1, 1952, page 17. Their total cost is estimated at $9,812,000 and delivery is expected early this year

The **Monongahela** has ordered 12 1,200-hp. diesel switching units, class DES-B-1, equipped for multiple-unit operation, from the Baldwin-Lima-Hamilton Corporation. Delivery of the locomotives, costing an estimated $1,284,672, is expected in June.

The **Western Pacific** has ordered four 1,500-hp. road-switchers from the Electro-Motive Division of General Motors Corporation. The Locomotives, expected for delivery in April will cost about $682,000.

SIGNALING

The **Reading** has ordered equipment from the General Railway Signal Company for the installation of a coded interlocking at Rutherford, Pa.

The **Southern Pacific** has ordered, from the Union Switch & Signal Division of the Westinghouse Air Brake Company, material to install centralized traffic control on approximately 100 miles of single track between Klamath Falls, Ore., and Crescent Lake. The control machine will be located at Dunsmuir, Cal., division headquarters, approximately 107 miles south of the southern end of the C.T.C. territory.

IRON AND STEEL

Some 12 miles of welded rail will be laid by the **Northern Pacific,** starting at a point just east of Livingston, Mont. The project will involve an expenditure of about $425,000 for the rail and its installation, plus an additional $100,000 for rock ballasting the same territory. The project, when completed, will bring the NP's total of welded rail in service close to the 40-mile point. The new installation will be on the NP's main transcontinental line and will be completed by the end of next summer.

CONSTRUCTION

Another Major Line Change To Be Undertaken by UP

More than 10 miles of new double track will be constructed by the Union Pacific starting early this spring. The new track will begin at a point just west of the Rawlins, Wyo., yard and swing south of the present line to reduce the main route distance to Cherokee by 0.71 miles; the maximum grade from 0.82 to 0.75 per cent; and the maximum curvature from 3 degrees to 1 degree.

The newly announced project should not be confused with the 42-mile Sherman Hill by-pass which is currently under construction between Cheyenne and a point near Dale Creek, some 140 miles east of the Rawlins project. Grading on the latter project will be undertaken by Morrison-Knudson Construction Company in the near future. Track work will be handled by UP forces.

Atchison, Topeka & Santa Fe.— Dismantling of the present station and construction of a new passenger station at Lubbock, Tex., will be handled under a contract awarded to C. X. Lambie & Co., of Amarillo.

Texas & New Orleans. — This road has asked the I.C.C. to approve construction of a 1.5-mile industrial spur to serve a plant of the Texas Gulf Sulphur Company near Beaumont, Tex. Cost of the new line would be met from working capital. The road said the commission should find its approval is not required, and should dismiss the formal application.

FINANCIAL

Central of Georgia.—*New Chairman; New Directors.*—See page 51.

Florida East Coast.—*Reorganization.*—Reversing a decision of the United States District Court for the Southern District of Florida, the Fifth U.S. Circuit Court of Appeals at New Orleans, ruled last week in favor of the I.C.C.'s plan to merge the FEC with the Atlantic Coast Line. The Circuit Court's three-to-two decision, in which the majority held the I.C.C. plan to be "most favorable" to FEC bondholders, will probably be appealed to the United States Supreme Court.

New York Central.—*New Director.*—Earle J. Machold, president of the Niagara Mohawk Power Corporation, has been elected to this road's board of directors.

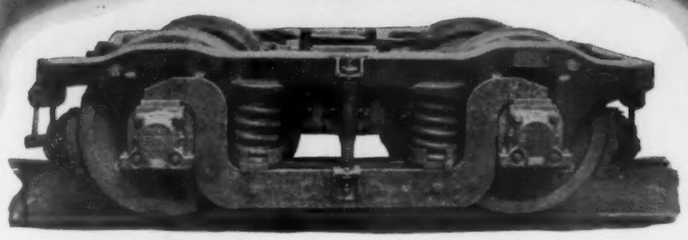
Northern Pacific.—*New Director.*—William A. Parker, president of Incorporated Investors, Boston, Mass., was elected a director on January 15. Incorporated Investors has been a large NP stockholder for a number of years.

Rahway Valley Company. — *Extension of Lease Agreements.* — This company, which leases and operates the Rahway Valley Railroad (8.7 miles) and the Rahway Valley Line (2.98 miles), has obtained authority from the I.C.C. to extend existing lease agreements. The RVRR trackage is between Roselle Park, N.J., and Summit; and the Valley Line is in the same area. The respective leases have been modified so the operating company shall pay rental based on net income, rather than a fixed amount annually.

Savannah & Atlanta.—*New Chairman.*—See page 51.

(Continued on page 61)

Invest Now to Reduce Future Maintenance Costs



Commonwealth Box-Express Car Truck
with clasp brakes

Commonwealth Box-Express Car Truck
with single shoe brakes

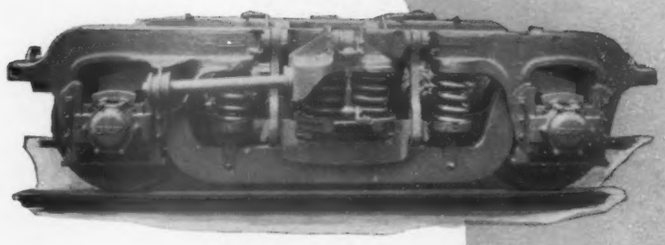
Apply these COMMONWEALTH TRUCKS

In the interest of long range economy—in lowering maintenance expense in future years—now is the time to modernize existing equipment with COMMONWEALTH Trucks of latest designs. Several leading railroads are utilizing the new COMMONWEALTH Box-Express Car Trucks and Outside Swing Hanger Type Passenger Car Trucks for better performance and operating economy.

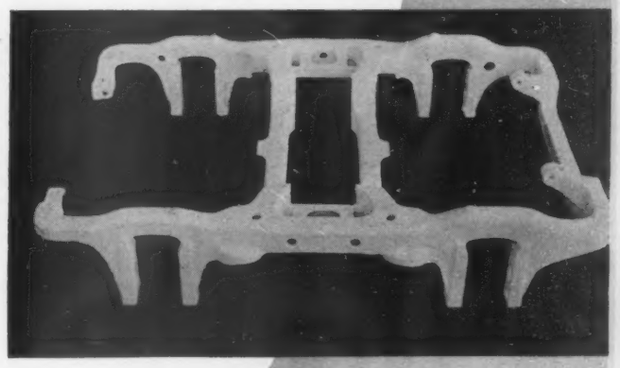
COMMONWEALTH Box-Express Car Trucks are especially designed for freight cars operating in passenger train service. Fully equalized and with swing bolsters, these trucks provide smooth, safe riding under light or loaded cars, protecting car contents and minimizing damage claims. Upkeep costs of trucks, car body and track structure are materially reduced.

COMMONWEALTH Passenger Car Trucks with outside hanger spring suspension reduce car body roll and assure smooth, comfortable riding at all speeds.

All COMMONWEALTH Trucks have one-piece cast steel frames and bolsters which provide great strength, long service life and a minimum of maintenance expense.



Commonwealth Outside Swing Hanger Type
Passenger Car Truck



One-piece Cast Steel Frame for
Box-Express Car Truck

To reduce future costs, apply Commonwealth Trucks now.

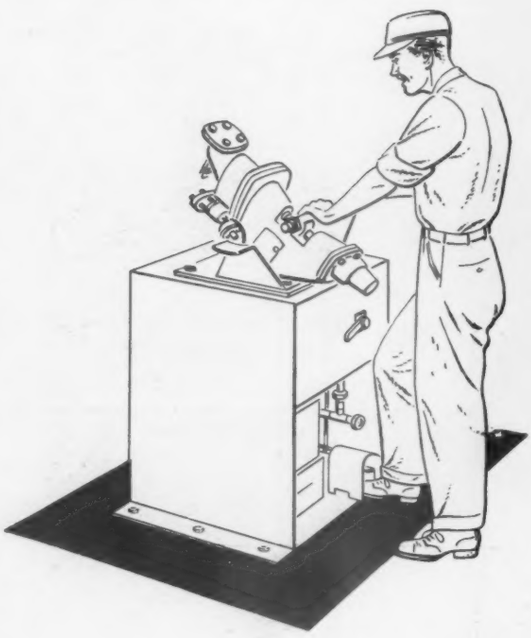
GENERAL STEEL CASTINGS

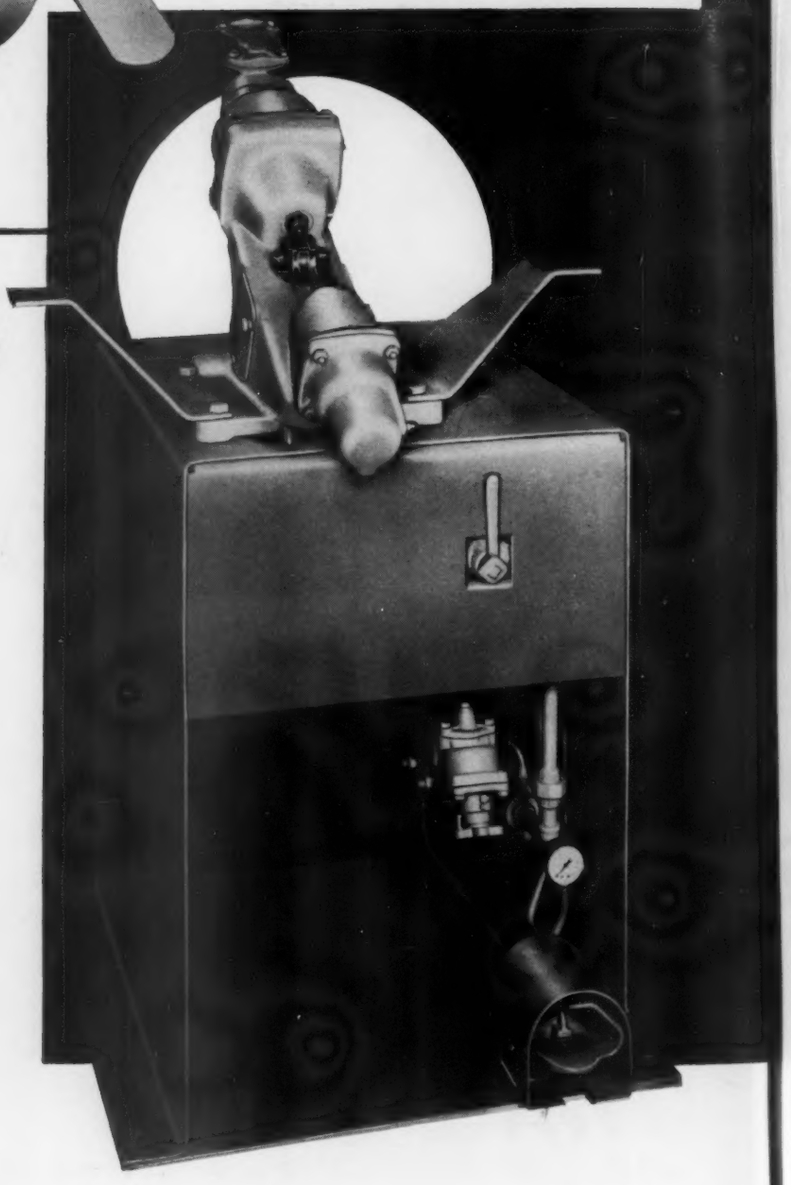
GRANITE CITY, ILL. • EDDYSTONE, PA.

Apply Punch-Lok Hose Clamps in just 3 seconds

with the

Westinghouse Air Brake B-1 Clamping Machine





HERE is the quickest, and most economical way to apply hose clamps. In one operation, this new device pulls the hose clamp tight, locks it, and shears off the excess metal. Clamp tension is identical on every piece.

It's safe, too. The operator has a clear view of his work at all times because the table is conveniently sloped. And the foot pedal operating valve can be nullified at any point in the cycle, thus stopping the machine.

Get in touch with your Westinghouse Representative and see how easily the new B-1 can speed up production in *your* shop, and give you tighter, more uniform hose clamps.

Westinghouse Air Brake Company

AIR BRAKE DIVISION

WILMERDING, PA.

Table of Selected Income and Balance Sheet Items of Class I Steam Railways for September and nine months of 1952 appears on page 65.

(*Continued from page 58*)

Texas Pacific - Missouri Pacific Terminal of New Orleans.—*Extension.*—This terminal company has applied to the I.C.C. for authority to extend its lines by acquiring from the T&P a four-mile segment at New Orleans. The American Cynamide Company expects to locate a new plant on the segment. The line must be transferred to the terminal company before the new plant can get the benefit of line-haul rates to and from New Orleans. (Switching charges published by the terminal to locations on the west side of the Mississippi river are absorbed by railroads operating into New Orleans on the east side of the river.) The terminal company, the T&P and the MP also asked the I.C.C. for approval of an agreement permitting the latter two roads to make joint use of the new terminal company segment.

Investment Publications

[The surveys listed herein are for the most part prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information, *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

Baker, Weeks & Co., One Wall st., New York 5.

Outlook for Pennsylvania and New York Central. January 5

H. Hentz & Co., 60 Beaver st., New York 4.

Annual Review and Forecast, January 1953.

Smith, Barney & Co., 14 Wall st., New York 5.

Atlantic Coast Line Railroad Company. Common Stock. Railroad Bulletin No. 116, December 22.

Vilas & Hickey, 49 Wall st., New York 5.

Buffalo, Rochester & Pittsburgh Railway Co. Consolidated Mortgage 4½s of 1957. December 26.

J. R. Williston, Bruce & Co., 115 Broadway, New York 6.

Current Position of Railroad Securities. January 5.

New Securities

Application has been filed with the I.C.C. by:

PENNSYLVANIA.—To assume liability for $4,800,000 of equipment trust certificates, the first installment of a proposed $9,030,000 issue which would finance in part the acquisition of equipment, listed below, which is expected to cost a total of $12,040,000.

	Description and Builder	Estimated Unit Cost
11	1,200-hp. diesel-electric switching locomotives (Electro-Motive Division, General Motors Corporation)	$111,000
3	1,200-hp. diesel-electric switching locomotives (Electro-Motive)	110,000
750	40-ft. box cars (PRR shops)	6,510
315	50-ft. box cars (PRR shops)	7,780
200	50-ft. flat cars (PRR shops)	7,989
200	65-ft. gondola cars (PRR shops)	7,790

The whole issue of certificates would be dated March 1, and would mature in 15 annual installments of $602,000 each, beginning March 1, 1954. They would be sold by competitive bids, with the interest rate to be set by such bids.

Security Price Averages

	Jan. 20	Prev. Week	Last Year
Average price of 20 representative railway stocks	68.85	68.68	57.41
Average price of 20 representative railway bonds	95.14	95.53	91.45

Dividends Declared

ATLANTIC COAST LINE.—$1.25, quarterly, payable March 13 to holders of record February 13.

CHICAGO, INDIANAPOLIS & LOUISVILLE.—class A, $1.25, accumulated, payable February 13 to holders of record January 30.

GEORGIA R.R. & BANKING.—$1.75, quarterly, payable January 15 to holders of record December 31.

NORTH CAROLINA.—7% guaranteed, $3.50, semiannual, payable February 1 and August 1 to holders of record January 20 and July 20.

NORTHERN OF NEW HAMPSHIRE.—$1.50, quarterly, payable January 31 to holders of record January 15.

RAILWAY OFFICERS

EXECUTIVE

As reported in *Railway Age* December 22, page 60, **Clarence M. Gordon** has been appointed assistant vice-president of the PITTSBURGH & LAKE ERIE at Pittsburgh. Mr. Gordon, who was born at Pittsburgh on December 4, 1891, entered the service of the

Clarence M. Gordon

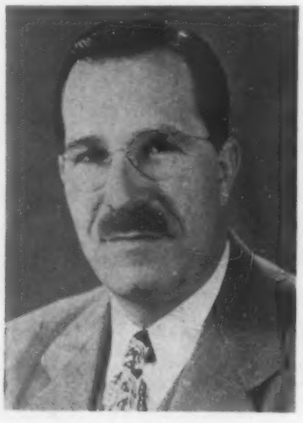
P&LE as a clerk on June 23, 1909. After a series of other promotions, he became assistant auditor disbursements on January 17, 1921; assistant to general auditor on April 15, 1936; assistant general auditor on February 1, 1940; and general auditor on May 1, 1940.

Oscar M. Sandahl, freight traffic manager of the MINNEAPOLIS & ST. LOUIS at Minneapolis, has been promoted to assistant vice-president—traffic. Mr. Sandahl joined the M&SL as traffic agent at Des Moines in 1922 and served successively as traveling agent at Des Moines and Chicago and general agent at Detroit

Oscar M. Sandahl

and Boston. He went to Minneapolis as assistant general freight agent in 1937 and was promoted in turn to general freight agent and assistant traffic manager. In 1943 he became freight traffic manager.

J. A. Warren, assistant general traffic manager of the RAILWAY EXPRESS AGENCY, has been appointed assistant to vice-president—administration and finance at New York. Mr.



J. A. Warren

Warren began his career as an express handler at San Francisco and has held various supervisory positions in the west, including that of supervisor of employee and public relations at Los Angeles and regional traffic manager at San Francisco. He is a former member of the faculty of Golden Gate College and the School of Traffic Management at San Francisco.

As *Railway Age* reported December 22, 1952, directors of the CHICAGO, BURLINGTON & QUINCY system have elected **F. L. Kartheiser,** assistant to president, as vice-president —

As reported on page 51 of this issue, William E. Dillard, general manager of the Central of Georgia, has been elected vice-president and general manager of that company.

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executive department, and **A. W. Lavidge,** comptroller as vice-president and comptroller. **Henry H. Urbach,** general superintendent motive power and machinery, has been appointed assistant vice-president — mechanical operations.

Mr. Kartheiser began his railroad career with the CB&Q in 1910. From 1917 to 1919 he served in the U. S. Navy Reserve Force. In 1919 he became associated with the United States Railroad Administration, Cen-

F. L. Kartheiser

tral Western region; and in 1920 returned to the Burlington, where he has served in a variety of mechanical department positions.

Mr. Lavidge started with the Burlington in 1905 at Omaha as a clerk in the accounting department; was appointed assistant auditor of expenditures in 1920, and auditor of expenditures four years later. In January 1936 he was appointed auditor of freight accounts, becoming assistant general auditor later that year. In 1946 he was promoted to general auditor, and in 1949 was appointed comptroller.

Mr. Urbach joined the Burlington as a machinist apprentice at Havelock, Neb., in 1907. From 1912 until 1923 he held a number of different jobs in the mechanical department. From 1923

A. W. Lavidge

to 1926 he was master mechanic at Brookfield, Mo., and then at McCook, Neb. In 1926 he became assistant superintendent motive power at Chicago, and from 1927 to 1936 was super-

Henry H. Urbach

intendent motive power at Havelock. In 1936 he was named mechanical assistant to vice-president, being promoted to general superintendent motive power and machinery in 1948.

FINANCIAL, LEGAL & ACCOUNTING

As *Railway Age* announced December 29, page 52, **William L. Hudson,** secretary and auditor of the CHICAGO & WESTERN INDIANA and the BELT RAILWAY OF CHICAGO, has retired. Mr. Hudson entered railroad service with the Belt in a clerical capacity and was later in auditing work. In September 1925 he joined the C&WI and engaged in similar work until he was appointed chief clerk of the auditing department in 1928. On January 1, 1937, he was appointed assistant auditor of both roads and in April of that year was **further promoted to auditor of each.** He became secretary and auditor of the roads in October 1939.

As reported in *Railway Age* January 5, page 53, **Robert H. Hann** has been named secretary, and **William H. Meyn,** treasurer, of the ERIE at Cleveland. Mr. Hann was born at Hornell, N.Y., on June 19, 1907, and was graduated from Rutgers Univer-

Robert H. Hann

sity (LL.B., 1940). He entered railroad service in 1924 as machinist apprentice with the Erie at Hornell and subsequently served as clerk and claim agent. From 1939 to 1941 Mr. Hann was secretary to John C. Barbour, New Jersey Circuit Court judge at Hackensack, N.J. He was appointed attorney of the Erie at Cleveland in 1942, as-

William H. Meyn

sistant general attorney in 1944, and general attorney in 1946.

Mr. Meyn joined the Erie 48 years ago as a clerk for the auditor of revenues at New York. Three years later he transferred to the treasury department as clerk, going to Cleveland in 1931. Mr. Meyn was promoted to assistant to treasurer in 1937 and advanced to assistant treasurer in 1949.

As reported in *Railway Age* December 22, page 60, **Paul F. Kraber** has been appointed general auditor of the

PITTSBURGH & LAKE ERIE at Pittsburgh. Mr. Kraber was born at Pittsburgh 53 years ago and joined the P&LE as a clerk on December 4, 1918. He later served as an assistant examiner of ac-

Paul F. Kraber

counts, joint facility clerk, joint facility accountant and traveling accountant, becoming auditor disbursements on May 1, 1940.

James Lee Williams, statistical clerk of the ATLANTIC COAST LINE, has been appointed statistician in the office of president at Wilmington, N.C.

OPERATING

As reported in *Railway Age* December 29, 1952, page 54, **George W. Adams,** general manager, Eastern lines, of the SOUTHERN at Charlotte, N.C., retired on January 1. Mr. Adams was born at Juliette, Ga., on January 4, 1883, and entered the service of the Southern in August 1900 as an agent-telegrapher. He subsequently served

George W. Adams

as dispatcher, assistant chief dispatcher, chief dispatcher and trainmaster. Mr. Adams was appointed superintendent at Selma, Ala., in February 1929, later transferring to Atlanta, Macon and Louisville, successively. In October 1937 he was promoted to general manager, Eastern lines, at Charlotte.

W. I. Howard Riddington, superintendent of car service and assistant to general manager of the CENTRAL VERMONT at St. Albans, Vt., has been appointed assistant to general manager and assigned to administrative duties. **Clifford E. Sabins,** assistant superintendent of the Northern division at St. Albans, has been named assistant to general manager in charge of labor relations. **Marcus J. Richardson,** assistant superintendent of car service, has been appointed superintendent of car service. **John E. Simpson,** inspector of transportation and station services, has been appointed assistant superintendent of the Northern division.

A. G. Smith has been appointed superintendent of the St. Louis division of the RAILWAY EXPRESS AGENCY at St. Louis. **E. J. Hardebeck,** chief clerk to president, has been appointed superintendent of the Central Illinois division at Chicago, succeeding **R. R. Tulloch,** who has been transferred to the Cincinnati division. **E. C. Taylor** has been appointed superintendent of organization at New York.

TRAFFIC

As reported in *Railway Age* December 15, 1952, page 63, **Frank V. Schaub** has been promoted to general passenger agent of the SOUTHERN PACIFIC at New Orleans. Mr. Schaub started his railroad career with the SP as a messenger at New Orleans in 1910. He transferred to the passenger traffic department two years later and held a number of positions prior to his promotion to traveling passenger agent in 1920. He was later appointed district passenger agent for the Southern Pacific Steamship Lines, and held a comparable position with the railroad at New Orleans prior to his appointment as assistant general passenger agent in 1948.

G. A. Totty has been promoted to general agent—sales and service of the NORFOLK SOUTHERN at Wilson, N. C.

H. Derry has been appointed general agent of the CHICAGO & NORTH WESTERN at Oakland, Cal. **E. M. Dunning** has been named general agent at Sacramento.

Frank R. Kuhns, district freight and passenger agent of the CHICAGO, ROCK ISLAND & PACIFIC at Cincinnati, has retired, after 46 years of service. He has been succeeded by **F. H. Fox.**

L. C. Keys, express traffic manager of the ATCHISON, TOPEKA & SANTA FE, at Chicago, has retired after 48 years of service. Succeeding Mr. Keys is **H. K. Sinclair,** formerly mail traffic manager, at Chicago. With Mr. Sinclair's succession a new title has been created, that of general mail and express traffic manager. **H. A. Brooks,** assistant general baggage agent, at Topeka, succeeds Mr. Sinclair.

Roger L. Rochester has been appointed district traffic agent of the ILLINOIS CENTRAL at Meridian, Miss., succeeding **Charles F. Bahr,** who has resigned.

Donald J. Collins has been named district freight agent of the PENNSYLVANIA at Davenport, Iowa, succeeding **Franklyn Royce,** who has been promoted elsewhere.

J. N. Buterbaugh has been appointed district freight agent of the CLINCHFIELD at Chicago, succeeding the late **A. J. Van Ornum.**

PURCHASES & STORES

As reported in *Railway Age* December 22, 1952, page 64, **A. D. Stewart** has been appointed general storekeeper of the NORFOLK & WESTERN at Roanoke, Va. Mr. Stewart joined the N&W in April 1904 as a mason man on the Scioto division and a year later was appointed derrick man, resigning in October 1905 to teach school. He re-

A. D. Stewart

joined the N&W in February 1912 in the supply department at Portsmouth, Ohio, subsequently becoming storekeeper at Williamson, Bluefield and Portsmouth, respectively. Mr. Stewart was appointed chief clerk to general storekeeper at Roanoke in 1933 and became assistant general storekeeper there in January 1950.

V. N. Dawson, general storekeeper of the BALTIMORE & OHIO, has been appointed assistant purchasing agent, with headquarters as before at Baltimore, succeeding **E. W. Walther,** who has retired after 49 years of service. **L. G. Kohler,** storekeeper at Mt. Clare, succeeds Mr. Dawson as general storekeeper at Baltimore. Mr. Dawson was born at Rowlsburg, W.Va., on May 20, 1893, and entered railroad

service on April 26, 1910, as a machinist apprentice on the B&O, subsequently serving as car repairman, clerk, material distributor and storekeeper. From January 1919 to January 1920 he was supervisor of stores for the U.S. Rail-

V. N. Dawson

road Administration, and then became division storekeeper of the B&O Chicago Terminal. He later served the B&O as district storekeeper, assistant general storekeeper, and general storekeeper, being appointed to the latter position on December 1, 1944.

ENGINEERING

As reported in *Railway Age* December 22, 1952, page 64, **R. H. Morrison** has been appointed assistant chief engineer of the BANGOR & AROOSTOOK at Houlton, Me. Mr. Morrison was born at Rumford, Me., on February 15, 1912, and attended the University of Maine (B.S. in C.E., 1936). He began his career in that year as engineer and inspector for the bridge division

R. H. Morrison

of the State Highway Commission at Augusta. Two years later he went with Hector J. Cyr, Inc., Waterville, Me., as superintendent and engineer. He joined the B&A in February 1940 as superintendent of bridges and buildings at Houlton, and was appointed principal assistant engineer in **February 1945.**

As *Railway Age* announced January 12, page 264, **William M. Jaekle** has been appointed assistant chief engineer of the SOUTHERN PACIFIC at San Francisco. Mr. Jaekle received his engineering degree at Stanford University in 1934. He then joined the SP on its Western Division. He was assistant division engineer on both the Salt Lake and

William M. Jaekle

Western divisions, and division engineer on the Rio Grande and Coast divisions, successively, and was appointed construction engineer on a line change in Oregon in 1948. Mr. Jaekle, became assistant engineer maintenance of way and structures at San Francisco in 1951, which position he held until his recent appointment.

As reported in *Railway Age* January 12, page 266, **James E. Wiggins, Jr.,** has been promoted to engineer of water supply of the SOUTHERN at Washington, D. C. Mr.

James E. Wiggins, Jr.

Wiggins was born December 25, 1902, in South Carolina, and was graduated from Clemson College (B.S.C.E., 1924). In February 1926 he entered the employ of the Southern in the engineering department at Charlotte, N. C. After serving at Danville, Va., he returned to Charlotte as a junior engineer in June 1937. Later that year he was appointed assistant engineer and in August 1946 was promoted to assistant engineer of water supply at Washington, in which capacity he served until his recent promotion.

James C. Boyle, chief engineer of the CENTRAL VERMONT at St. Albans, Vt., will retire on pension at the end of January, after 37 years of service.

SPECIAL

Robert S. Eisenhauer has been appointed news editor in the press relations division of the CHESAPEAKE & OHIO at Cleveland. Mr. Eisenhauer was formerly picture editor of the Cleveland News.

K. A. Browne, research consultant —president's office, CHESAPEAKE & OHIO, has been appointed director of research, with headquarters remaining at Cleveland.

Miss Gertrude R. Rodgers has been appointed manager of employment of the BALTIMORE & OHIO, and **Charles E. Schwatka,** assistant manager of employment. Miss Rodgers will be responsible for employment policies and procedures for the system. She also will continue to supervise activities of the employment office at Baltimore, of which she has been manager since 1927. Mr. Schwatka has been supervisor of employment.

Leo A. Brown, general advertising agent of the WABASH, has bee.. named director of advertising and public relations—not just director of advertising, as this column incorrectly stated on January 12 when publishing Mr. Brown's portrait (page 266). Mr. Brown joined the Wabash in 1936 after having spent four years with a motion picture company as branch office advertising sales manager and as advertising film salesman. He moved through various positions in the road's passenger traffic department in both Chicago and St. Louis until 1942, when he was appointed advertising agent at St. Louis. He was named general advertising agent at that point following his return from a two-year tour of duty with the U.S. Navy.

OBITUARY

George C. Schrand, retired superintendent of the Chicago freight terminal of the CHICAGO & NORTH WESTERN, died on December 31 at Hollywood, Fla.

Dwight R. Spencer, special accountant of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, died recently at his home in Riverside, Ind.

Current Publications

PAMPHLETS

Progress of Eighty Years. Japanese National Railways, 1952. 40 pages, illustrations. Japanese National Railways, JNR Building Marunouchi, Tokyo, Japan. Free.

A pictorial history of the development and growth of the Japanese National Railways.

Accurate Weights. Norfolk & Western Railway Co., Roanoke, Va. Free.

This new illustrated pamphlet is printed in English, French, German and Italian to make it easier for European importers of bituminous coal to understand N&W shipping methods and port facilities. It explains the exactness with which the railway weighs the coal it transports from Appalachian fields, tells of ample yard facilities along the line, describes the piers at the port of Norfolk on Hampton Roads, and pictures the many new mechanical devices which aid the dispatch of coal abroad. Copies of the booklet may be secured in any or all of the languages.

American Trucking Trends, 1952. 44 pages, charts, graphs. American Trucking Associations, 1424 Sixteenth st., N.W., Washington 6, D.C. Free.

A statistical presentation showing year-to-year changes in the pattern of many phases of motor truck operation. Statistics cover employees, wages, equipment, revenues, expenses, mileage, traffic, etc.

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways

(Switching and Terminal Companies Not Included)

Income items	United States For the month of September 1952	1951	For the nine months of 1952	1951
1. Net railway operating income	$120,912,579	$78,668,843	$732,335,413	$606,459,581
2. Other income	19,207,206	15,503,257	161,527,033	166,741,859
3. Total income	140,119,785	94,172,100	893,862,446	773,201,440
4. Miscellaneous deductions from income	4,182,612	4,653,008	36,554,981	42,472,962
5. Income available for fixed charges	135,937,173	89,519,092	857,307,465	730,728,478
6. Fixed charges:				
6–01. Rent for leased roads and equipment	11,009,846	7,736,287	92,273,059	82,869,308
6–02. Interest deductions[1]	27,235,718	25,197,829	234,922,252	224,505,974
6–03. Amortization of discount on funded debt	244,674	246,889	2,203,679	2,135,719
6–04. Total fixed charges	38,490,238	33,181,005	329,398,990	309,511,001
7. Income after fixed charges	97,446,935	56,338,087	527,908,475	421,217,477
8. Other deductions	2,990,787	3,109,724	26,681,495	28,095,752
9. Net income	94,456,148	53,228,363	501,226,980	393,121,725
10. Depreciation (Way and structures and Equipment)	41,153,828	42,720,961	360,753,843	353,273,997
11. Amortization of defense projects	.....	.....	.....	.....
12. Federal income taxes	74,370,476	52,506,947	422,773,001	381,549,716
13. Dividend appropriations:				
13–01. On common stock	19,817,615	11,386,349	166,597,719	148,899,111
13–02. On preferred stock	2,909,587	1,580,832	52,654,025	69,082,211
Ratio of income to fixed charges (Item 5 ÷6—04)	3.53	2.70	2.60	2.36

Selected Expenditure and Asset Items	United States Balance at the end of September 1952	1951
17. Expenditures (gross) for additions and betterments—Road	$272,950,338	$247,277,528
18. Expenditures (gross) for additions and betterments—Equipment	719,555,667	752,083,484
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	483,169,795	464,668,549
20. Other unadjusted debits	84,961,083	122,694,269
21. Cash	916,323,297	843,674,309
22. Temporary cash investments	885,680,328	855,489,603
23. Special deposits	126,122,741	71,687,406
24. Loans and bills receivable	822,622	2,035,388
25. Traffic and car-service balances—Dr.	68,720,399	51,942,516
26. Net balance receivable from agents and conductors	183,573,559	181,895,164
27. Miscellaneous accounts receivable	365,045,242	394,056,890
28. Materials and supplies	872,614,664	911,929,987
29. Interest and dividends receivable	15,409,558	13,453,317
30. Accrued accounts receivable	231,062,080	216,811,835
31. Other current assets	37,016,552	33,474,055
32. Total current assets (items 21 to 31)	3,702,391,042	3,576,450,470
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$234,452,042	$165,032,686
41. Loans and bills payable[3]	4,642,955	3,771,220
42. Traffic and car-service balances—Cr.	113,270,343	108,020,950
43. Audited accounts and wages payable	512,269,925	561,817,167
44. Miscellaneous accounts payable	217,517,809	203,693,749
45. Interest matured unpaid	41,273,946	39,290,230
46. Dividends matured unpaid	21,265,871	18,449,686
47. Unmatured interest accrued	79,386,098	77,161,368
48. Unmatured dividends declared	20,571,262	19,074,121
49. Accrued accounts payable	213,725,483	237,147,144
50. Taxes accrued	875,721,990	831,267,546
51. Other current liabilities	158,030,656	92,197,124
52. Total current liabilities (items 41 to 51)	2,257,676,338	2,191,890,305
53. Analysis of taxes accrued:		
53–01. U. S. Government taxes	654,467,265	624,418,257
53–02. Other than U. S. Government taxes	221,254,725	206,849,289
54. Other unadjusted credits	275,597,388	314,040,709

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default), which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission.
Subject to revision.

Looking for Ways to

Cut Car-Building Costs?

Siding and Lining of Rugged Exterior-type Fir Plywood Goes On Fast, Lasts for Years

MORE THAN 100,000 railroad cars have been built or re-built with Douglas fir plywood.

Strong, durable plywood serves as siding and lining on reefers, box cars, work cars, passenger coaches. Used for bulkheads, flooring, baggage racks, cabinets, trim.

Cuts costs because big panels cover quickly, go on fast, require no special tools. Plywood cars are tighter, lighter, economical to maintain. Rugged plywood protects ladings. It's proved in use—a superior material for car building and modernizing jobs.

Write for "Plywood Gets the Highball." Douglas Fir Plywood Association, Tacoma 2, Washington.

Douglas Fir Plywood

These Trademarks Identify Quality-Tested Fir Plywood

PLYSHIELD® is the versatile "one-side" grade of Exterior-type for siding, many other outside uses. Identified by Plyshield keystone on panel back, EXT-DFPA® on panel edge; 100% waterproof glue. Interior-type grades for inside use. Plastic-surfaced and hardboard-faced panels for special jobs.

EXTERIOR-TYPE Douglas Fir Plywood PLYSHIELD DFPA INSPECTED EXT-DFPA

EXT-DFPA®

THERE'S A TYPE AND GRADE FOR EVERY USE

Rates: $5.00 an inch (1" x 1⅝") per insertion; employment ads 10 cents a word, minimum $2.00. Add $1.00 for box address.

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USED AS IS RECONDITIONED

STANDARD GAUGE FREIGHT CARS

Box—Double Sheathed, 50-Ton
Box, Single Sheathed, 50-Ton
Gondolas, Composite or All-Steel, 50-Ton
Hoppers, Twin, All-Steel, 50-Ton Cross Dump
Tank, 3,000-Gallon, High Pressure
Tank, 8,000-Gallon, Coiled and Non-Coiled

EXTRA LONG FLAT CARS

40- & 50-Ton Capacity, Length 70' and 74'

CABOOSE CARS

Eight Wheel, Cupola Type

STANDARD GAUGE AIR DUMP CARS

Side Dump, 20-Yd., 40-Ton, Lift Door
End Dump, 20-Yd., 50-Ton, Drop Door
Side Dump, 30-Yd., 50-Ton Drop Door

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Jordan Spreader
Locomotive Cranes
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1500-H.P., 120-Ton, Type 0-4-4-0

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4 All-Steel Dining Cars, Air-Conditioned

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"ANYTHING containing IRON or STEEL"

STORAGE TANKS
6,000 Gallon
8,000 Gallon
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Our New Service on Diesel Locomotive Operation is highly recommended for Engineers and Firemen

The Railway Educational Bureau Omaha 2, Nebraska

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FOR SALE

Freight Car Repair Parts
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Home of Unconditionally Guaranteed Material

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FOR SALE

65 ton General Electric 380 HP diesel electric locomotive. Rebuilt.

4 heavy duty steel flat cars, 70 ton capacity.

30 ton Industrial Brownhoist locomotive crane gasoline powered.

MISSISSIPPI VALLEY EQUIPMENT CO.

309 Locust St. St. Louis 1, Mo.

CLASSIFIED DEPARTMENT

SALE OF SURPLUS LOCOMOTIVES

THE SANITARY DISTRICT OF CHICAGO
ROOM 603, 910 SOUTH MICHIGAN AVENUE, CHICAGO 5, ILLINOIS

The Sanitary District of Chicago is offering for sale Three (3) Surplus Steam Locomotives the basic specifications of which are listed below.

Any one interested in submitting a bid on these units may secure the official forms by application to Mr. Harry E. Eaton, Purchasing Agent, The Sanitary District of Chicago, Room 603, 910 South Michigan Avenue, Chicago 5, Illinois. Bids must be submitted on said forms. Bids will close at 1:30 P.M. Central Standard Time, on Thursday, February 19, 1953.

All necessary information is contained on the above mentioned bidding forms.

SPECIFICATIONS

The three (3) locomotives are of the six (6) wheel Switcher Type with separate tenders. Two locomotives are equipped to burn fuel oil and one to burn bituminous coal. The oil burning locomotives are capable of developing a rated tractive effort of not less than 45,000 pounds with saturated steam at a working pressure of 200 pounds per square inch gauge.

The Locomotives are designed for operation on a track of 4 ft. 8½ in. gauge and on curves of 478 ft. radius. The boilers of the oil burning locomotives are designed for a working steam pressure of 225 pounds per square inch gauge and have been operated at 200 pounds per square inch gauge.

The coal burning locomotive is capable of developing a rated tractive effort of not less than 36,000 pounds with superheated steam at 185 pounds per square inch working pressure. The oil burning locomotives are of H. K. Porter Company manufacture. The coal burning locomotive is of United States Railway Administration design and was built by the American Locomotive Company. All locomotives have been well maintained and are in perfect working order.

The boiler of the coal burning locomotive is designed for operation at 185 pounds per square inch and is provided with 357 square feet of superheater surface. All boilers are equipped with flexible staybolts in the breaking zones.

Smoke boxes are of the extended type with pressed steel front and door. The smoke stacks are of close grained cast iron. Throttles are of the balanced valve type and are located in the steam dome. Frames are of cast steel and cylinders are of close grained cast iron with integral piston valve chambers. Pistons are of cast steel and are bull ring and follower plate type. Steam chest valves are of the piston type, actuated by Walschaert valve motions.

Driving wheels are six in number with an overall tread diameter of 51 inches with flanges on all wheels. Wheel centers and driving boxes are of cast steel. Couplers are of the automatic type and conform to ARA specifications for type D couplers. Tenders have riveted tanks. Tenders for the oil burning locomotives have a capacity of 6000 gallons of water and 2500 gallons of fuel oil. Underframes are of riveted steel construction with cast steel end sills.

The tender of the coal burning locomotive has a capacity of 8 tons of coal and 5000 gallons of water. The tender underframe is of one piece cast steel construction.

The oil burning locomotives are provided with one 8½ inch cross-compound air compressor each. The coal burning locomotive is equipped with two 8½ inch cross-compound compressors. All locomotives have ample air capacity for operation of fifteen (15) dump cars.

The braking system is of the combined automatic and schedule 6 ET Westinghouse type. The oil burners are of the steam atomizing type.

All locomotives are equipped with two Pyle National Electric Headlights, mounted one each forward and back. Each locomotive is equipped with a 32 volt turbo generator.

THE SANITARY DISTRICT OF CHICAGO
BY HARRY E. EATON
CLERK OF THE BOARD

FOR SALE

Fourteen 70-ft. all-steel flat cars.

Wood decking and A B brakes. One private railroad car with living room, dining room, 3 bedrooms, and kitchen. All cars in first class condition. Will pass interchange. Inspection can be made at our Chicago yard.

Erman-Howell Division

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POSITION WANTED
Sales or Sales-and-Service

Experienced man. Have primary contacts with majority of railroads in mechanical and engineering departments; repair shops, car builders, yard maintenance forces; maintenance and engineering departments of transit companies. Also industrial contacts with plant engineers, architects, etc.
Address Box 153, RAILWAY AGE, 79 West Monroe St., Chicago 3, Ill.

WANTED

Position in railroad sales. Three years' experience as sales representative in the railroad field plus three years service engineering. References. Chicago resident.

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ENGINEERS
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All Railway Equipment
Structures and Materials
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BUY BONDS

Advertisers IN THIS ISSUE

The information contained in the advertising pages of Railway Age constitutes an important supplement to the editorial content of this paper. Refer to them for the latest advances in equipment, materials and supplies.

A

American Locomotive Company 28, 29
Agency—G. M. Basford Company

American Optical Company 24
Agency—Sutherland-Abbott

American Steel Foundries 10
Agency—Erwin, Wasey & Company, Inc.

B

Bethlehem Steel Company 3
Agency—Jones and Brakeley

C

Caterpillar 69
Agency—N. W. Ayer & Son

Chicago Steel Service Company 68
Agency—Fred H. Ebersold, Inc.

Classified Department 66, 67

D

Douglas Fir Plywood Association 65
Agency—The Condon Company, Inc.

E

Edgwater Steel Company 23
Agency—Walker & Downing

Electro-Motive Division, General Motors Corporation ..... Front Cover
Agency—Kudner Agency, Inc.

G

General American Transportation Corporation 36
Agency—Weiss & Giller, Inc.

General Electric Company 28, 29
Agency—G. M. Basford Company

General Railway Signal Company 32

General Steel Castings 59
Agency—Oakleigh R. French & Associates

Glass Fibers, Inc 30
Agency—Blaco Advertising Agency

H

Hunt Company, Robert W. 67

Hyatt Bearing Division, General Motors Corp. 4
Agency—D. T. Brothers & Co.

Hyman-Michaels Company 34

I

Iron & Steel Products, Inc. 66

L

Luria Steel and Trading Corp. 67

M

Matisa Equipment Corporation, The 9
Agency—W. S. Kirkland Advertising

Midland Reclamation Co. 66

Mississippi Valley Equipment Co. 66

O

Ohio Locomotive Crane Co., The 34
Agency—Coleman Todd & Associates

R

Railway Educational Bureau, The 66

Remington Rand Inc. 26
Agency—Leeford Advertising Agency, Inc.

S

Sanitary District of Chicago 67

Scullin Steel Co. 2
Agency—Batz-Hodgson-Neuwoehner Advertising Agency

Simmons-Boardman Publishing Corporation ..25, 34, 35

T

Timber Structures, Inc. 31
Agency—Alport & O'Rourke Advertising Agency

Timken Roller Bearing Company, The ..... Back Cover
Agency—Batten, Barton, Durstine & Osborn, Inc.

U

Union Switch & Signal 6
Division of Westinghouse Air Brake Co.
Agency—Ketchum, MacLeod & Grove, Inc.

W

Warren Tool Corporation 18
Agency—Meek & Thomas, Inc.

Waugh Equipment Company 27

Westinghouse Air Brake Company 60
Agency—Batten, Barton, Durstine & Osborn, Inc.

Y

Youngstown Steel Car Corporation 34
Agency—Meek & Thomas, Inc.

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STEEL AT YOUR SERVICE

CHICAGO STEEL SERVICE COMPANY

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COMPLETE SERVICE IN STAINLESS and CARBON STEELS

In its tenth year and going strong

24 hours a day

7 days a week

Two Caterpillar D17000 Diesels power this General Electric 44-tonner. Since December, 1943, this locomotive has really "earned its keep" in the Atchison, Topeka & Santa Fe yards at Riverbank, Calif. In addition to caboosing trains and general switching, it handles lumber, lime, fertilizer, oil, fruits and canned goods on the 12-mile round trip to nearby Oakdale.

Caterpillar Railroad Diesels range in size up to 500 HP, and multiple Cat Engines can furnish power for 2,000-HP locomotives. As railroad operating records show, the simplicity and easy maintenance of Caterpillar Diesels mean high availability and long life. More than 90% of the 44-ton locomotives operating on Class I, II and III railroads in the U. S. are Caterpillar-powered.

Year-in-year-out dependability is only one way in which Caterpillar Diesels have paid off for the railroads. Another pay-off is the ready availability of parts from Caterpillar Dealers. The railroads do not have to tie up their funds in parts, because a stock of genuine Caterpillar parts is no farther than the nearest Caterpillar Dealer—and that means as close as the telephone.

CATERPILLAR, PEORIA, ILLINOIS

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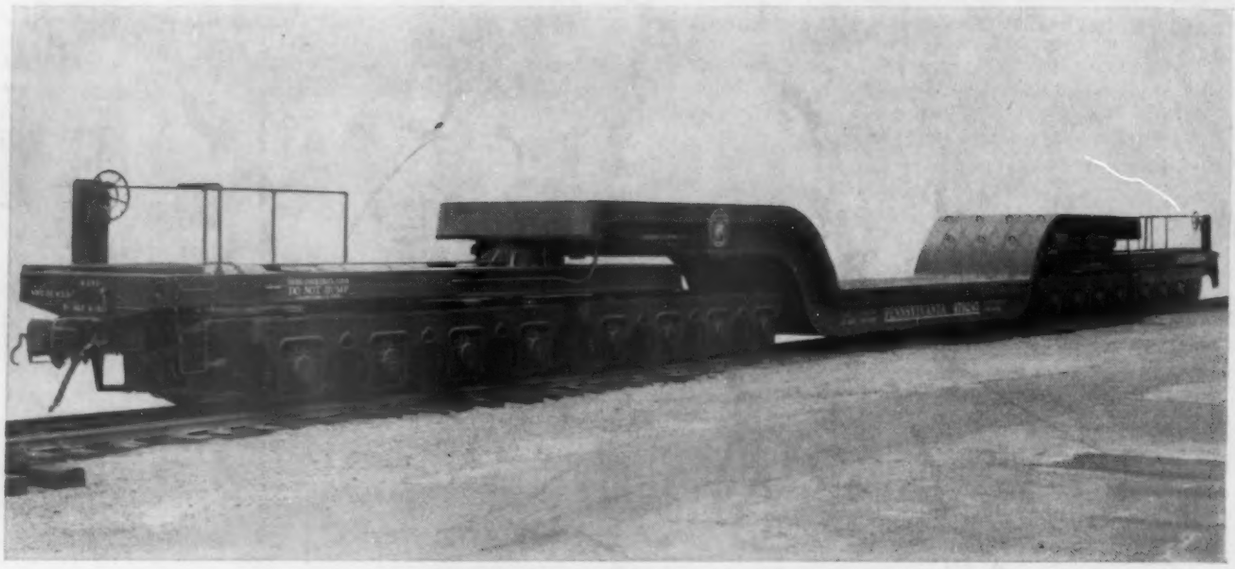
RAILROAD DIESELS

FOUNDED IN 1858



Pennsylvania puts new depressed center flat car on TIMKEN® bearings

LOAD limit, 503,600 pounds! Light weight, 500,400 pounds! It's the new million-pound well car, designed and built by The Pennsylvania Railroad to haul fully assembled turbo-generator sets, transformers and other extra-heavy equipment. To carry the tremendous load, Pennsylvania designers mounted the car on four, eight-wheel trucks equipped with Timken® tapered roller bearings.

Timken bearings reduce terminal inspection man-hours 90%. Lube bills can be cut up to 89%. Starting resistance is reduced 88%, permitting smoother starts and stops. Damage to lading is reduced.

To insure long, dependable service, Timken bearings are case-hardened to give them hard, wear-resistant surfaces and tough shock-resistant cores.

When all railroads switch to "Roller Freight", they'll save an estimated $190 million a year, net a 22% return on the investment! And the cost is down! Complete assemblies of cartridge journal box and Timken bearings for freight cars cost 20% less than applications of six years ago. For additional information, write The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".

TIMKEN

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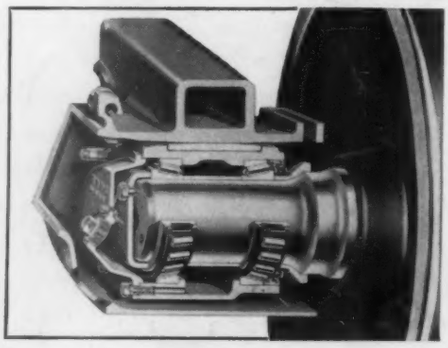

NOT JUST A BALL ◯ NOT JUST A ROLLER ⬭ THE TIMKEN TAPERED ROLLER ⬭ BEARING TAKES RADIAL ⬭ AND THRUST →⬭← LOADS OR ANY COMBINATION →✳←